

FINAL
Hazardous Waste
Post-Closure Permit
Pioneer Americas LLC
St. Gabriel, LA
LAD 062-666-540-PC-RN-1
AI # 2644
RECORD CENTER COPY

SIGNATURE PAGE

FINAL**LOUISIANA DEPARTMENT OF ENVIRONMENTAL QUALITY
HAZARDOUS WASTE POST-CLOSURE RENEWAL PERMIT**

PERMITTEE: PIONEER AMERICAS LLC

PERMIT NUMBER: LAD 062 666 540-PC-RN-1
Agency Interest # 2644/Activity # PER20010001

FACILITY LOCATION: 4205 Highway 75
IBERVILLE PARISH
ST. GABRIEL, LOUISIANA 70776

This permit is issued by the Louisiana Department of Environmental Quality (LDEQ) under the authority of the Louisiana Hazardous Waste Control Law R.S. 20:2171 et seq., and the regulations adopted thereunder, and under the authority of the 1984 Hazardous and Solid Waste Amendments (HSWA) to the Resource Conservation and Recovery Act (RCRA) to Pioneer Americas LLC, (hereafter referred to as the "permittee"), for the facility located at St. Gabriel, Iberville Parish, Louisiana, latitude 30° 14' 30" N and longitude 91° 06' 31" W.

For the purposes of this permit, the "Administrative Authority" shall be the Secretary of the LDEQ, or his/her designee.

The permittee must comply with all terms and conditions of this permit. This permit consists of the conditions set forth herein, and the applicable regulations contained in the Louisiana Administrative Code, Title 33, Part V, Subpart 1, (LAC 33:V.Subpart 1). Applicable regulations are those that are in effect on the date of issuance of this permit.

This permit is based on the assumption that the information provided to LDEQ by the permittee is accurate. Further, this permit is based in part on the provisions of Sections 206, 212, and 224 of the HSWA of 1984, which modify Section 3004 and 3005 of RCRA. In particular, Section 206 requires corrective action for all releases of hazardous waste or constituents from any solid waste management unit at a treatment, storage or disposal facility seeking a permit, regardless of the time at which waste was placed in such unit.

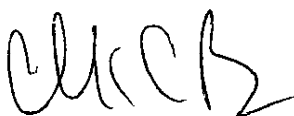
Section 212 provides authority to review and modify the permit at any time. Any inaccuracies found in the submitted information may be grounds for the termination, modification, revocation, and reissuance of this permit (see LAC 33:V.323) and potential enforcement action. The permittee must inform the LDEQ of any deviation from or changes in the information in the application that would affect the permittee's ability to comply with the applicable regulations or permit conditions.

This permit shall be effective as of October 29, 2007, and shall remain in effect until October 29, 2017, unless revoked, reissued, modified or terminated in accordance with LAC 33:V.323 and 705 of the Louisiana Hazardous Waste Regulations. The Administrative Authority may issue any permit for a duration that is less than the maximum term of ten (10) years and the term shall not be extended beyond the maximum duration by modification in accordance with LAC 33:V.315.

Post-closure requirements of LAC 33:V. Subchapter B must continue for at least thirty (30) years after the date of closure for those units listed in Section III.O.1 of this permit. Expiration of this permit does not relieve the permittee of the responsibility to reapply for a permit for the remainder of the thirty (30) year post-closure care period.

Provisions of this permit may be appealed in writing pursuant to LA. R.S. 30:2024(A) within 30 days from receipt of the permit. Only those provisions specifically appealed will be suspended by a request for hearing, unless the Secretary elects to suspend other provisions as well. A request for hearing must be sent to the following:

Louisiana Department of Environmental Quality
Office of the Secretary
Attention: Hearings Clerk, Legal Services Division
P. O. Box 4302
Baton Rouge, LA 70821-4302



Chuck Carr Brown Ph.D., Assistant Secretary
Louisiana Department of Environmental Quality

9/20/07
Date

PUBLIC PARTICIPATION

PUBLIC NOTICE
LOUISIANA DEPARTMENT OF ENVIRONMENTAL QUALITY (LDEQ)
PIONEER AMERICAS, LLC, SAINT GABRIEL FACILITY
FINAL HAZARDOUS WASTE POST-CLOSURE PERMIT RENEWAL

The LDEQ, Office of Environmental Services, has made the decision to issue the final hazardous waste post-closure renewal permit for Pioneer Americas LLC, Post Office Box 23, St. Gabriel, Louisiana 70776-0023 for the St. Gabriel facility. **The facility is located at 4205 Highway 75, in St. Gabriel, Iberville Parish.**

Under this hazardous waste post-closure permit renewal, Pioneer Americas LLC will manage and perform post-closure care of the Ponds 1-4, Sulfide Pond, North and South Surge Ponds. The facility is a site where corrective action is taking place to recover and remediate contaminated groundwater. Recovery wells pump contaminated groundwater to a waste recovery system where it is treated and discharged to a Publicly Owned Treatment Works (POTW). The hazardous waste unit involved in this permit action treated and disposed of hazardous waste generated at the site. The hazardous waste unit is currently closed and requires a permit to govern post-closure care

The final permitting action and related documents are available for review and copying (all documents copied will be subject to a \$0.25 charge per copied page) at the LDEQ, Public Records Center, Room 127, 602 North 5th Street, Baton Rouge, LA. Viewing hours are from 8:00 a.m. to 4:30 p.m., Monday through Friday (except holidays). **The available information can also be accessed electronically on the Electronic Document Management System (EDMS) on the DEQ public website at www.deq.louisiana.gov.**

Additional copies of this action may be reviewed at the Ascension Parish Library, Gonzales Branch, 708 South Irma Boulevard, Gonzales, LA 70737 and the Iberville Parish Library, East Iberville Branch, 5715 Monticell Street, St. Gabriel, LA 70776.

In accordance with Louisiana Revised Statutes (La R.S.) 30:2024, the Permittee may file with the secretary a request for a hearing no later than thirty (30) days after the notice of the action is served. Under La. R.S. 30:2050.21, any person aggrieved by a final permit action may appeal to the Nineteenth Judicial District Court within 30 days after the notice of the action has been given.

Previous notices have been published in the Post South on July 19, 2007 and The Advocate on July 20, 2007. An announcement was made on WJBO-AM on July 19, 2007.

Inquiries or requests for additional information regarding this permit action, should be directed to Toni Metoyer Booker, LDEQ, Waste Permits Division, P.O. Box 4313, Baton Rouge, LA 70821-4313, phone (225) 219-0956.

Persons wishing to be included on the LDEQ permit public notice mailing list or for other public participation related questions should contact the Public Participation Group in writing at LDEQ, P.O. Box 4313, Baton Rouge, LA 70821-4313, by email at degmaillistrequest@la.gov or contact the LDEQ Customer Service Center at (225) 219-LDEQ (219-5337).

Permit public notices including electronic access to the issued permit and associated information can be viewed at the LDEQ permits public notice webpage at www.deq.louisiana.gov/apps/pubNotice/default.asp and general information related to the public participation in permitting activities can be viewed at www.deq.louisiana.gov/portal/tabid/2198/Default.aspx

Alternatively, individuals may elect to receive the permit public notices via email by subscribing to the LDEQ permits public notice List Server at www.doa.louisiana.gov/oes/listservpage/ldeq_pn_listserv.htm

All correspondence should specify AI Number 2644, Permit Number LAD 062 666 540-PC-RN-1, and Activity Number PER20010001.

Scheduled Publication Date: September 27, 2007



DEPARTMENT OF ENVIRONMENTAL QUALITY

KATHLEEN BABINEAUX BLANCO

GOVERNOR

MIKE D. McDANIEL, Ph.D.

SECRETARY

September 21, 2007

Via Fax (225) 388-0164

Ms. Susan Bush
Legal Advertising
The Advocate
Post Office Box 588
Baton Rouge, LA 70821-0588

**Re: REQUEST FOR PUBLIC COMMENT ON THE
FINAL HAZARDOUS WASTE POST CLOSURE PERMIT RENEWAL
PIONEER AMERICAS, LLC, SAINT GABRIEL FACILITY
AI NUMBER 2644, PERMIT NUMBER LAD 062 666 540-PC-RN-1, PER20010001**

Dear Ms. Bush:

Please publish the attached legal notice regarding the above referenced facility as a regular legal ad in The Advocate once only on **Thursday, September 27, 2007**. You will also receive a copy of the legal notice itself via email at legal.ads@theadvocate.com.

State regulations require that we provide notification to the public and allow sufficient time for public comments. For this department to be assured that adequate notification is provided, we are requesting that you sign and date the enclosed 'Verification by Newspaper', and fax it to the attention of Ms. Laura Ambeau (225) 325-8157 immediately upon publication. If the notice cannot be published on the date requested, please contact Ms. Ambeau (225) 219-3277 or email laura.ambeau@la.gov.

The invoice for this public notice should be sent to:

Mr. David A. Gasper, Facility Contact
Pioneer Americas, LLC, Saint Gabriel Facility
Post Office Box 23
4205 Highway 75
Saint Gabriel, LA 70776-0023
Phone (225) 642-1800

The official proof of publication in the form of a tear sheet should be mailed to my attention LDEQ, Environmental Assistance Division, P.O. Box 4313, Baton Rouge, LA 70821-4313.

Thank you for assisting in our effort to serve the public.

Sincerely,

Laura M. Ambeau
Environmental Scientist, Public Participation Group

LA/Attachments/2

ENVIRONMENTAL SERVICES

: PO BOX 4313, BATON ROUGE, LA 70821-4313

P:225-219-3181 F:225-219-3309

WWW.DEQ.LOUISIANA.GOV

VERIFICATION BY NEWSPAPER

The undersigned verifies that the following public notice was published in the _____ (date of publication) edition of The Advocate:

Re: REQUEST FOR PUBLIC COMMENT ON THE
FINAL HAZARDOUS WASTE POST CLOSURE PERMIT RENEWAL
PIONEER AMERICAS, LLC, SAINT GABRIEL FACILITY
AI NUMBER 2644, PERMIT NUMBER LAD 062 666 540-PC-RN-1, PER20010001

THE ADVOCATE:

By: _____ Date: _____

Immediately upon publication please fax this form, along with a copy of the public notice as it appeared in the newspaper, to Ms. Laura Ambeau (225) 325-8157.

PLEASE NOTE:

THIS VERIFICATION DOES NOT RELIEVE THE NEWSPAPER OF THE RESPONSIBILITY OF PROVIDING OFFICIAL PROOF OF PUBLICATION, IN THE FORM OF A TEAR SHEET, TO THE LDEQ AS REQUESTED IN OUR COVER LETTER.

**DEPARTMENT OF ENVIRONMENTAL QUALITY**

KATHLEEN BABINEAUX BLANCO

GOVERNOR

MIKE D. McDANIEL, Ph.D.

SECRETARY

September 21, 2007

Via Fax (225) 687-1814

Phone (225) 687-3288

Ms. Michelle Didier
Legal Advertising
The Plaquemine Post/South
Post Office Box 589
Plaquemine, LA 70765-0589

**Re: REQUEST FOR PUBLIC COMMENT ON THE
FINAL HAZARDOUS WASTE POST CLOSURE PERMIT RENEWAL
PIONEER AMERICAS, LLC, SAINT GABRIEL FACILITY
AI NUMBER 2644, PERMIT NUMBER LAD 062 666 540-PC-RN-1, PER20010001**

Dear Ms. Didier:

Please publish the attached legal notice regarding the above referenced facility as a regular legal ad in The Post South once only on **Thursday, September 27, 2007**. You will also receive a copy of the legal notice itself via email at pscirculation@postsouth.com.

State regulations require that we provide notification to the public and allow sufficient time for public comments. For this department to be assured that adequate notification is provided, we are requesting that you sign and date the enclosed 'Verification by Newspaper', and fax it to the attention of Ms. Laura Ambeau (225) 325-8157 immediately upon publication. If the notice cannot be published on the date requested, please contact Ms. Ambeau (225) 219-3277 or email laura.ambeau@la.gov.

The invoice for this public notice should be sent to:

Mr. David A. Gasper, Facility Contact
Pioneer Americas, LLC, Saint Gabriel Facility
Post Office Box 23
4205 Highway 75
Saint Gabriel, LA 70776-0023
Phone (225) 642-1800

The official proof of publication in the form of a tear sheet should be mailed to my attention LDEQ, Environmental Assistance Division, P.O. Box 4313, Baton Rouge, LA 70821-4313.

Thank you for assisting in our effort to serve the public.

Sincerely,

Laura M. Ambeau
Environmental Scientist, Public Participation Group

LA/Attachments/2

ENVIRONMENTAL SERVICES

: PO BOX 4313, BATON ROUGE, LA 70821-4313

P:225-219-3181 F:225-219-3309

WWW.DEQ.LOUISIANA.GOV

VERIFICATION BY NEWSPAPER

The undersigned verifies that the following public notice was published in the _____ (date of publication) edition of **The Post South**:

Re: REQUEST FOR PUBLIC COMMENT ON THE
FINAL HAZARDOUS WASTE POST CLOSURE PERMIT RENEWAL
PIONEER AMERICAS, LLC, SAINT GABRIEL FACILITY
AI NUMBER 2644, PERMIT NUMBER LAD 062 666 540-PC-RN-1, PER20010001

THE POST SOUTH:

By: _____ Date: _____

Immediately upon publication please fax this form, along with a copy of the public notice as it appeared in the newspaper, to Ms. Laura Ambeau (225) 325-8157.

PLEASE NOTE:

THIS VERIFICATION DOES NOT RELIEVE THE NEWSPAPER OF THE RESPONSIBILITY OF PROVIDING OFFICIAL PROOF OF PUBLICATION, IN THE FORM OF A TEAR SHEET, TO THE LDEQ AS REQUESTED IN OUR COVER LETTER.



DEPARTMENT OF ENVIRONMENTAL QUALITY

KATHLEEN BABINEAUX BLANCO

GOVERNOR

MIKE D. McDANIEL, Ph.D.

SECRETARY

SEP 25 2007

CERTIFIED MAIL 7003 2260 0005 9323 4837
RETURN RECEIPT REQUESTED

Mr. David A. Gasper
Pioneer Americas LLC
P.O. Box 23
St. Gabriel, LA 70776

RE: Pioneer Americas LLC
LAD 062 666 540-PC-RN-1
Agency Interest # 2644
Final Hazardous Waste Post-Closure Renewal Permit

Dear Mr. Gasper

Attached please find your copy of the Pioneer Americas LLC, Final Hazardous Waste Renewal Permit, LAD062666540-PC-RN-1, which incorporates language pertaining to the post-closure care and maintenance of the Ponds 1-4, Sulfide Pond, North and South Surge Ponds at the Pioneer Americas LLC, St. Gabriel Facility.

In accordance with Louisiana Revised Statute (La. R.S.) 30:2024, the Permittee may file with the secretary a request for hearing no later than thirty (30) days after the notice of the action is served. Under La. R.S. 30:2050.21, any person aggrieved by a final permit action may appeal to the Nineteenth Judicial District Court within thirty (30) days after the notice of the action has been given.

Please reference your Agency Interest Number (2644), Permit Activity Number (PER20010001) and EPA ID Number (LAD062666540) on all future correspondence pertaining to this issue. Should you have any questions concerning this matter, please contact Ms. Toni Metoyer Booker of the Waste Services Section at (225) 219-0956.

Sincerely,

Bijan Sharafkhani, P.E.
Administrator
Waste Permits Division

tmb

Attachment

cc: Kishor Fruitwala, Ph.D., P.E. – EPA Region 6
Chief, RCRA Facility Assessment (6PD-A)
1445 Ross Avenue
Dallas, Texas 75202

ENVIRONMENTAL SERVICES

: PO BOX 4313, BATON ROUGE, LA 70821-4313

P:225-219-3181 F:225-219-3309

WWW.DEQ.LOUISIANA.GOV

VERIFICATION BY FACILITY

The undersigned verifies that the Pioneer Americas, LLC, Saint Gabriel Facility has received a copy of the final hazardous waste post-closure permit renewal and public notice regarding:

**Re: REQUEST FOR PUBLIC COMMENT ON THE
 FINAL HAZARDOUS WASTE POST CLOSURE PERMIT RENEWAL
 PIONEER AMERICAS, LLC, SAINT GABRIEL FACILITY
 AJ NUMBER 2644, PERMIT NUMBER LAD 062 666 540-PC-RN-1, PER20010001**

PIONEER AMERICAS, LLC, SAINT GABRIEL FACILITY

By: _____ Date: _____

Please complete and return this form promptly to the address listed below:

Ms. Laura Ambeau
Louisiana Department of Environmental Quality
Office of Environmental Services
Environmental Assistance Division
PO Box 4313
Baton Rouge, LA 70821-4313
Phone (225) 219-3277

FAX (225) 325-8157



DEPARTMENT OF ENVIRONMENTAL QUALITY

KATHLEEN BABINEAUX BLANCO

GOVERNOR

MIKE D. McDANIEL, Ph.D.

SECRETARY

September 21, 2007

Telephone (225) 642-8380

Fax (225) 642-8381

Lydia Haydel, Director
Iberville Parish Library
East Iberville Branch
5715 Monticello Street
St. Gabriel, LA 70776

**Re: REQUEST FOR PUBLIC COMMENT ON THE
FINAL HAZARDOUS WASTE POST CLOSURE PERMIT RENEWAL
PIONEER AMERICAS, LLC, SAINT GABRIEL FACILITY
AI NUMBER 2644, PERMIT NUMBER LAD 062 666 540-PC-RN-1, PER20010001**

Dear Ms. Haydel:

We request that the enclosed final hazardous waste post-closure permit renewal and public notice for the referenced facility be made available for public review upon receipt. It is imperative that these documents are available for review at all times; therefore, they cannot be checked out by anyone at any time.

The documents should be retained during the permitting process. At the close of the permitting period, the Louisiana Department of Environmental Quality, Office of Environmental Services (LDEQ-OES), Permits Division, will provide written notice to you requesting that the information be removed.

Please complete the attached 'Verification by Library' and mail to Ms. Laura Ambeau, LDEQ-OES, Environmental Assistance Division, PO Box 4313, Baton Rouge, LA 70821-4313, or Fax to (225) 325-8157.

We appreciate your assistance in our efforts to serve the public. If you have any questions, please call Ms. Ambeau at (225) 219-3277.

Sincerely,

Laura Ambeau
Environmental Scientist, Public Participation Group

LA

Attachments/2

ENVIRONMENTAL SERVICES

: PO BOX 4313, BATON ROUGE, LA 70821-4313

P:225-219-3181 F:225-219-3309

WWW.DEQ.LOUISIANA.GOV

VERIFICATION BY LIBRARY

The undersigned verifies that the Iberville Parish Library, Saint Gabriel Branch, has received a copy of the final hazardous waste post-closure permit renewal and public notice associated with the following facility:

**Re: REQUEST FOR PUBLIC COMMENT ON THE
 FINAL HAZARDOUS WASTE POST CLOSURE PERMIT RENEWAL
 PIONEER AMERICAS, LLC, SAINT GABRIEL FACILITY
 AI NUMBER 2644, PERMIT NUMBER LAD 062 666 540-PC-RN-1, PER20010001**

IBERVILLE PARISH LIBRARY, SAINT GABRIEL BRANCH:

By: _____ Date: _____

Please complete and return this form promptly to the address listed below:

Ms. Laura Ambeau
Louisiana Department of Environmental Quality
Office of Environmental Services
Environmental Assistance Division
Post Office Box 4313
Baton Rouge, Louisiana 70821-4313
Phone (225) 219-3277

FAX (225) 325-8157



DEPARTMENT OF ENVIRONMENTAL QUALITY

KATHLEEN BABINEAUX BLANCO

GOVERNOR

MIKE D. McDANIEL, Ph.D.

SECRETARY

September 21, 2007

Phone (225) 647-8924

Nate Stewart, Director
Ascension Parish Library
Gonzales Branch
708 S. Irma Blvd.
Gonzales, Louisiana 70737

**Re: REQUEST FOR PUBLIC COMMENT ON THE
FINAL HAZARDOUS WASTE POST CLOSURE PERMIT RENEWAL
PIONEER AMERICAS, LLC, SAINT GABRIEL FACILITY
AI NUMBER 2644, PERMIT NUMBER LAD 062 666 540-PC-RN-1, PER20010001**

Dear Mr. Stewart:

We request that the enclosed final hazardous waste post-closure permit renewal and public notice for the referenced facility be made available for public review upon receipt. It is imperative that these documents are available for review at all times; therefore, they cannot be checked out by anyone at any time.

The documents should be retained during the permitting process. At the close of the permitting period, the Louisiana Department of Environmental Quality, Office of Environmental Services (LDEQ-OES), Permits Division, will provide written notice to you requesting that the information be removed.

Please complete the attached 'Verification by Library' and mail to Ms. Laura Ambeau, LDEQ-OES, Environmental Assistance Division, PO Box 4313, Baton Rouge, LA 70821-4313, or Fax to (225) 325-8157.

We appreciate your assistance in our efforts to serve the public. If you have any questions, please call Ms. Ambeau at (225) 219-3277.

Sincerely,

Laura Ambeau
Environmental Scientist, Public Participation Group

LA

Attachments/2

ENVIRONMENTAL SERVICES

: PO BOX 4313, BATON ROUGE, LA 70821-4313

P:225-219-3181 F:225-219-3309

WWW.DEQ.LOUISIANA.GOV

VERIFICATION BY LIBRARY

The undersigned verifies that the Ascension Parish Library, Gonzales Branch, has received a copy of the final hazardous waste post-closure permit renewal and public notice associated with the following facility:

**Re: REQUEST FOR PUBLIC COMMENT ON THE
FINAL HAZARDOUS WASTE POST CLOSURE PERMIT RENEWAL
PIONEER AMERICAS, LLC, SAINT GABRIEL FACILITY
AI NUMBER 2644, PERMIT NUMBER LAD 062 666 540-PC-RN-1, PER20010001**

ASCENSION PARISH LIBRARY, GONZALES BRANCH:

By: _____ Date: _____

Please complete and return this form promptly to the address listed below:

Ms. Laura Ambeau
Louisiana Department of Environmental Quality
Office of Environmental Services
Environmental Assistance Division
Post Office Box 4313
Baton Rouge, Louisiana 70821-4313
Phone (225) 219-3277

FAX (225) 325-8157



DEPARTMENT OF ENVIRONMENTAL QUALITY

KATHLEEN BABINEAUX BLANCO

GOVERNOR

MIKE D. McDANIEL, Ph.D.

SECRETARY

September 21, 2007

225-687-3257

Jessel "Mitchell" Ourso, Parish President
Iberville Parish Council
58050 Meriam Street
Plaquemine, LA 70565-0389

**Re: REQUEST FOR PUBLIC COMMENT ON THE
FINAL HAZARDOUS WASTE POST CLOSURE PERMIT RENEWAL
PIONEER AMERICAS, LLC, SAINT GABRIEL FACILITY
AI NUMBER 2644, PERMIT NUMBER LAD 062 666 540-PC-RN-1, PER20010001**

Dear Parish President Ourso:

The Louisiana Department of Environmental Quality (LDEQ) is enclosing for your reference, a copy of the final hazardous waste post-closure permit renewal and legal notice that is scheduled to be published in The Post South and The Advocate on September 27, 2007.

Should you have any questions regarding the facility, additional permit information may be obtained from Ms. Toni M. Booker, LDEQ, Permits Division, P.O. Box 4313, Baton Rouge, LA 70821-4313, telephone (225) 219-0956.

Sincerely,

Laura M. Ambeau
Environmental Scientist, Public Participation Group

LA

Enclosures/2

ENVIRONMENTAL SERVICES

: PO BOX 4313, BATON ROUGE, LA 70821-4313

P:225-219-3181 F:225-219-3309

WWW.DEQ.LOUISIANA.GOV

VERIFICATION BY PARISH GOVERNMENT

The undersigned verifies that the Parish President, Iberville Parish Council has received a copy of the final hazardous waste post-closure permit renewal regarding:

**Re: REQUEST FOR PUBLIC COMMENT ON THE
FINAL HAZARDOUS WASTE POST CLOSURE PERMIT RENEWAL
PIONEER AMERICAS, LLC, SAINT GABRIEL FACILITY
AI NUMBER 2644, PERMIT NUMBER LAD 062 666 540-PC-RN-1, PER20010001**

Iberville Parish Government:

By: _____ Date: _____

Please complete and return this form promptly to the address listed below:

Ms. Laura Ambeau
Louisiana Department of Environmental Quality
Office of Environmental Services
Environmental Assistance Division
PO Box 4313
Baton Rouge, LA 70821-4313
PHONE (225) 219-3277

FAX (225) 325-8157



DEPARTMENT OF ENVIRONMENTAL QUALITY

KATHLEEN BABINEAUX BLANCO

GOVERNOR

MIKE D. McDANIEL, Ph.D.

SECRETARY

September 21, 2007

Mr. Kishor Fruitwala
U. S. EPA, Region VI
1445 Ross Avenue, Suite 1200
Mail Code: 6PDA
Dallas, Texas 75202-2733

**Re: REQUEST FOR PUBLIC COMMENT ON THE
FINAL HAZARDOUS WASTE POST CLOSURE PERMIT RENEWAL
PIONEER AMERICAS, LLC, SAINT GABRIEL FACILITY
AI NUMBER 2644, PERMIT NUMBER LAD 062 666 540-PC-RN-1, PER20010001**

Dear Mr. Fruitwala:

The Louisiana Department of Environmental Quality (LDEQ) is enclosing for your reference, a copy of the final hazardous waste post-closure permit renewal and legal notice that is scheduled to be published in The Plaquemines Post South and The Advocate on September 27, 2007.

Should you have any questions regarding the facility, additional permit information may be obtained from Ms. Toni M. Booker, LDEQ, Permits Division, P.O. Box 4313, Baton Rouge, LA 70821-4313, telephone (225) 219-0956.

Sincerely,

Laura Ambeau
Environmental Scientist, Public Participation Group

LA
Enclosures

ENVIRONMENTAL SERVICES

: PO BOX 4313, BATON ROUGE, LA 70821-4313

P:225-219-3181 F:225-219-3309

WWW.DEQ.LOUISIANA.GOV

VERIFICATION BY EPA

The undersigned verifies that the EPA Region VI Office has received a copy of the final hazardous waste post-closure permit renewal and public notice regarding:

**Re: REQUEST FOR PUBLIC COMMENT ON THE
FINAL HAZARDOUS WASTE POST CLOSURE PERMIT RENEWAL
PIONEER AMERICAS, LLC, SAINT GABRIEL FACILITY
AI NUMBER 2644, PERMIT NUMBER LAD 062 666 540-PC-RN-1, PER20010001**

EPA Region VI:

By: _____ Date: _____

Please complete and return this form promptly to the address listed below:

Ms. Laura Ambeau
Louisiana Department of Environmental Quality
Office of Environmental Services
Environmental Assistance Division
PO Box 4313
Baton Rouge, LA 70821-4313
Phone (225) 219-3277

FAX (225) 325-8157



DEPARTMENT OF ENVIRONMENTAL QUALITY

KATHLEEN BABINEAUX BLANCO

GOVERNOR

MIKE D. McDANIEL, Ph.D.

SECRETARY

September 21, 2007

Phone: (225) 219-3600

Fax: (225) 219-3695

Mr. Bobby Mayweather

Capital Regional Office

602 North 5th Street

Baton Rouge, La. 70821-4312

**Re: REQUEST FOR PUBLIC COMMENT ON THE
FINAL HAZARDOUS WASTE POST CLOSURE PERMIT RENEWAL
PIONEER AMERICAS, LLC, SAINT GABRIEL FACILITY
AI NUMBER 2644, PERMIT NUMBER LAD 062 666 540-PC-RN-1, PER20010001**

Dear Mr. Mayweather:

The Louisiana Department of Environmental Quality (LDEQ) is informing you of the final hazardous waste post-closure permit renewal and legal notice that is scheduled to be published in The Post-South and in The Advocate on September 27, 2007.

Should you have any questions regarding the facility, additional permit information may be obtained from Ms. Toni M. Booker, LDEQ, Permits Division, P.O. Box 4313, Baton Rouge, LA 70821-4313, telephone (225) 219-0956.

Sincerely,

Laura Ambeau

Environmental Scientist, Public Participation Group

LA

Enclosures

ENVIRONMENTAL SERVICES

: PO BOX 4313, BATON ROUGE, LA 70821-4313

P:225-219-3181 F:225-219-3309

WWW.DEQ.LOUISIANA.GOV

VERIFICATION BY REGIONAL OFFICE

The undersigned verifies that the Capital Regional Office has received a copy of the final hazardous waste operating permit renewal and public notice regarding:

**Re: REQUEST FOR PUBLIC COMMENT ON THE
FINAL HAZARDOUS WASTE POST CLOSURE PERMIT RENEWAL
PIONEER AMERICAS, LLC, SAINT GABRIEL FACILITY
AI NUMBER 2644, PERMIT NUMBER LAD 062 666 540-PC-RN-1, PER20010001**

Capital Regional Office:

By: _____ Date: _____

Please complete and return this form promptly to the address listed below:

Ms. Laura Ambeau
Louisiana Department of Environmental Quality
Office of Environmental Services
Environmental Assistance Division
PO Box 4313
Baton Rouge, LA 70821-4313
Phone (225) 219-3277

FAX (225) 325-8157

VERIFICATION FOR DELIVERY OF MATERIAL TO BE SCANNED

**THIS INFORMATION IS EXPECTED TO BE AVAILABLE ON EDMS
48 HOURS FROM THE DELIVERY DATE**

Public Notice Date: Thursday, September 27, 2007

The undersigned verifies that a copy of the final hazardous waste post-closure permit renewal for the referenced facility has been received by the First Floor Scanning Center:

**Re: REQUEST FOR PUBLIC COMMENT ON THE
FINAL HAZARDOUS WASTE POST CLOSURE PERMIT RENEWAL
PIONEER AMERICAS, LLC, SAINT GABRIEL FACILITY
AI NUMBER 2644, PERMIT NUMBER LAD 062 666 540-PC-RN-1, PER20010001**

FIRST FLOOR SCANNING CENTER:

The Material Was Delivered:

By: _____ Date: _____
Time _____

.....

The Public Participation Group contact for this packet of information is
Laura Ambeau, Rm. 321-31, 2-3277

PUBLIC NOTICE
LOUISIANA DEPARTMENT OF ENVIRONMENTAL QUALITY (LDEQ)
PIONEER AMERICAS, LLC, SAINT GABRIEL FACILITY
DRAFT HAZARDOUS WASTE POST-CLOSURE RENEWAL PERMIT

The LDEQ, Office of Environmental Services, is accepting written comments on a draft hazardous waste post-closure renewal permit for Pioneer Americas, LLC, Post Office Box 23, St. Gabriel, Louisiana 70776-0023 for the St. Gabriel facility. **The facility is located at 4205 Highway 75, in St. Gabriel, Iberville Parish.**

Pioneer Americas, LLC requested a renewal of the hazardous waste post-closure permit for the management and post-closure care of the Ponds 1-4, Sulfide Pond, North and South Surge Ponds. The facility is a site where corrective action is taking place to recover and remediate contaminated groundwater. Recovery wells pump contaminated groundwater to a waste recovery system where it is treated and discharged to a Publicly Owned Treatment Works (POTW). The hazardous waste unit involved in this permit action treated and disposed of hazardous waste generated at the site. The hazardous waste unit is currently closed and requires a permit to govern post-closure care.

Written comments, written requests for a public hearing, or written requests for notification of the final decision regarding this permit action may be submitted to Ms. Soumaya Ghosn at LDEQ, Public Participation Group, P.O. Box 4313, Baton Rouge, LA 70821-4313. **Written comments and/or written requests must be received by 12:30 p.m., Monday, September 10, 2007.** Written comments will be considered prior to a final permit decision.

If LDEQ finds a significant degree of public interest, a public hearing will be held. LDEQ will send notification of the final permit decision to the applicant and to each person who has submitted written comments or a written request for notification of the final decision.

The draft hazardous waste post-closure renewal permit, fact sheet, the hazardous waste post-closure permit renewal application, and supporting documents are available for review at the LDEQ, Public Records Center, Room 127, 602 North 5th Street, Baton Rouge, LA. Viewing hours are from 8:00 a.m. to 4:30 p.m., Monday through Friday (except holidays). **The available information can also be accessed electronically on the Electronic Document Management System (EDMS) on the DEQ public website at www.deq.louisiana.gov.**

An additional copy may be reviewed at the Iberville Parish Library - East Iberville Branch, 5715 Monticello Street, St. Gabriel, LA 70776.

Inquiries or requests for additional information regarding this permit action should be directed to Toni Metoyer Booker, LDEQ, Waste Permits Division, P.O. Box 4313, Baton Rouge, LA 70821-4313, phone (225) 219-0956.

Persons wishing to be included on the LDEQ permit public notice mailing list or for other public participation related questions should contact the Public Participation Group in writing at LDEQ, P.O. Box 4313, Baton Rouge, LA 70821-4313, by email at deqmaillistrequest@la.gov or contact the LDEQ Customer Service Center at (225) 219-LDEQ (219-5337).

Permit public notices including electronic access to the draft hazardous waste post-closure renewal permit and associated information can be viewed on the LDEQ permits public webpage at www.deq.louisiana.gov/apps/pubNotice/default.asp and general information related to the public participation in permitting activities can be viewed at www.deq.louisiana.gov/portal/tabid/2198/Default.aspx.

Alternatively, individuals may elect to receive the permit public notices via email by subscribing to the LDEQ permits public notice List Server at www.doa.louisiana.gov/oes/listservpage/ldeq_pn_listserv.htm

All correspondence should specify AI Number 2644, Permit Number 062666540-PC-RN-1, and Activity Number PER20010001.

Scheduled Publication Date: July 19, 2007 in The Post South and July 20, 2007 in The Advocate

original to TDHW
copy to APC/Ambeau
AT 2644

POST SOUTH

Post Office Box 589
Plaquemine, LA 70765-0589

PROOF OF PUBLICATION

Pioneer Americas

The hereto attached notice was published in the Post/South, a weekly newspaper of general circulation published in Plaquemine, Louisiana, and the official Journal of the State of Louisiana, City of Plaquemine, and the Parish of Iberville, in the following issues:

July 19, 2007

Tear Sheets Attached

Michelle Didier
Michelle Didier
Legal/Public Notices Representative

2007 JUL 23 11:11:05
FILED - CLC

**PUBLIC NOTICE
LOUISIANA
DEPARTMENT OF
ENVIRONMENTAL
QUALITY (LDEQ)
PIONEER
AMERICAS, LLC,
SAINT GABRIEL
FACILITY
DRAFT HAZARDOUS
WASTE
POST-CLOSURE
RENEWAL PERMIT**

The LDEQ, Office of Environmental Services, is accepting written comments on a draft hazardous waste post-closure

renewal permit for Pioneer Americas, LLC, Post Office Box 23, St. Gabriel, Louisiana 70776-0023 for the St. Gabriel facility. The facility is located at 4205 Highway 75, in St. Gabriel, Iberville Parish.

Pioneer Americas, LLC requested a renewal of the hazardous waste post-closure permit for the management and post-closure care of the Ponds 1-4, Sulfide Pond, North and South Surge Ponds. The facility is a site where corrective action is taking place to recover and remediate contaminated groundwater. Recovery wells pump contaminated groundwater to a waste recovery system where it is treated and discharged to a Publicly Owned Treatment Works (POTW). The hazardous waste unit involved in this permit action treated and disposed of hazardous waste generated at the site. The hazardous waste unit is currently closed and requires a permit to govern post-closure care.

Written comments, written requests for a public hearing, or written requests for notification of the final decision regarding this permit action may be submitted to Ms. Soumaya Ghosn at LDEQ.

Public Participation Group, P.O. Box 4313, Baton Rouge, LA 70821-4313. Written comments and/or written requests must be received by 12:30 p.m., Monday, September 10, 2007. Written comments will be considered prior to a final permit decision.

If LDEQ finds a significant degree of public interest, a public hearing will be held. LDEQ will send notification of the final permit decision to the applicant and to each person who has submitted written comments or a written request for notification of the final decision.

The draft hazardous waste post-closure renewal permit, fact sheet, the hazardous waste post-closure permit renewal application, and supporting documents are available for review at the LDEQ, Public Records Center, Room 127, 602 North 5th Street, Baton Rouge, LA. Viewing hours are from 8:00 a.m. to 4:30 p.m., Monday through Friday (except holidays). The available information can also be accessed electronically on the Electronic Document Management System (EDMS) on the DEQ public website at www.deq.louisiana.gov.

An additional copy may be reviewed at the Iberville Parish Library - East Iberville Branch, 5715 Monticello Street, St. Gabriel, LA 70776.

Inquiries or requests for additional information regarding this permit action should be directed to Toni Metoyer Booker, LDEQ, Waste Permits Division, P.O. Box 4313, Baton Rouge, LA 70821-4313, phone (225) 219-0956.

Persons wishing to be included on the LDEQ permit public notice mailing list or for other public participation related questions should contact the Public Participation Group in writing at LDEQ, P.O. Box 4313, Baton Rouge, LA 70821-4313, by email at deq-maillistrequest@la.gov or contact the LDEQ Customer Service Center at (225) 219-LDEQ (219-

Alternatively, individuals may elect to receive the permit public notices via email by subscribing to the LDEQ permits public notice List Server at www.doe.louisiana.gov/oes/listservpage/ldeq_pn_listserv.htm

All correspondence should specify Al Number 2644, Permit Number 062666540-PC-RN-1, and Activity Number PER 20010001.

07/19:b

■ Friday, July 20, 2007 ■ The Advocate

**LOUISIANA DEPARTMENT OF
ENVIRONMENTAL QUALITY
(LDEQ)
PIONEER AMERICAS, LLC
SAINT GABRIEL FACILITY
DRAFT HAZARDOUS WASTE
POST-CLOSURE RENEWAL
PERMIT**

The LDEQ, Office of Environmental Services, is accepting written comments on a draft hazardous waste post-closure renewal permit for Pioneer Americas, LLC, Post Office Box 23, St. Gabriel, Louisiana 70776-0023 for the St. Gabriel facility. The facility is located at 4205 Highway 75, in St. Gabriel, Iberville Parish.

Pioneer Americas, LLC requested a renewal of the hazardous waste post-closure permit for the management and post-closure care of the Ponds 1-4, Sulfide Pond, North and South Surge Ponds. The facility is a site where corrective action is taking place to recover and remediate contaminated groundwater. Recovery wells pump contaminated groundwater to a waste recovery system where it is treated and discharged to a Publicly Owned Treatment Works (POTW). The hazardous waste unit involved in this permit action treated and disposed of hazardous waste generated at the site. The hazardous waste unit is currently closed and requires a permit to govern post-closure care.

Written comments, written requests for a public hearing, or written requests for notification of the final decision regarding this permit action may be submitted to Ms. Soumaya Ghosn at LDEQ, Public Participation Group, P.O. Box 4313, Baton Rouge, LA 70821-4313. Written comments and/or written requests must be received by 12:30 p.m., Monday, September 10, 2007. Written comments will be considered prior to a final permit decision.

If LDEQ finds a significant degree of public interest, a public hearing will be held. LDEQ will send notification of the final permit decision to the applicant and to each person who has submitted written comments or a written request for notification of the final decision.

The draft hazardous waste post-closure renewal permit, fact sheet, the hazardous waste post-closure permit renewal application, and supporting documents are available for review at the LDEQ, Public Records Center, Room 127, 602 North 5th Street, Baton Rouge, LA. Viewing hours are from 8:00 a.m. to 4:30 p.m., Monday through Friday (except holidays). The available information can also be accessed electronically on the Electronic Document Management System (EDMS) on the DEQ public website at www.deq.louisiana.gov.

An additional copy may be reviewed at the Iberville Parish Library - East Iberville Branch, 5715 Monticello Street, St. Gabriel, LA 70776.

Inquiries or requests for additional information regarding this permit action should be directed to Toni Metoyer, Booker, LDEQ, Waste Permits Division, P.O. Box 4313, Baton Rouge, LA 70821-4313, phone (225) 219-0956.

Persons wishing to be included on the LDEQ permit public notice mailing list or for other public participation related questions should contact the Public Participation Group in writing at LDEQ, P.O. Box 4313, Baton Rouge, LA 70821-4313, by email at deqmail@ldeq.gov or contact the LDEQ Customer Service Center at (225) 219-LDEQ (219-5337).

Permit public notices including electronic access to the draft hazardous waste post-closure renewal permit and associated information can be viewed on the LDEQ permits public webpage at www.deq.louisiana.gov/app/s/pubnotice/default.asp and general information related to the public participation in permitting activities can be viewed at www.deq.louisiana.gov/portals/tabid/2198/Default.aspx.

Alternatively, individuals may elect to receive the permit public notices via email by subscribing to the LDEQ permits public notice list. Server at www.deq.louisiana.gov/oes/listser-vnace/ideq-on-listserv.htm

All correspondence should specify Al Number 2644, Permit Number 062666540-PC-RN-1, and Activity Number PER20010001.

3675055-jul 20-1t

original to IOA
EP
copy to PRG / Ambecum
AT 2644

2007 JUL 24 AM 11:17

DEQ - OES

07/20/2007 09:39 FAX 225 231 1879

CLEAR CHANNEL

001

07/16/2007 16:50 2252193309

DEQ OES

PAGE 02/03

VERIFICATION BY RADIO STATION

The undersigned verifies that the attached public announcement, associated with the public notice referenced below, was broadcast on WJBO-AM at 7:02 am (time of day) on the 19th (day) of July (month), 2007.

Re: REQUEST FOR PUBLIC COMMENT ON THE
DRAFT HAZARDOUS WASTE POST CLOSURE PERMIT RENEWAL
PIONEER AMERICAS, LLC, SAINT GABRIEL FACILITY
AT NUMBER 2644, PERMIT NUMBER LAD 062 666 540-PC-RN-1, PER20010001

WJBO-AM:

By: Michael Norwood Date: 7/20/07

Please complete and return this form to the address listed below promptly after broadcast of the public service announcement, or fax it to the attention of Laura Ambeau at (225) 325-8157.

Ms. Laura Ambeau
Louisiana Department of Environmental Quality
Office of Environmental Services
Environmental Assistance Division
PO Box 4313
Baton Rouge, LA 70821-4313
Phone (225) 219-3277

FAX (225) 325-8157

Public Notice

DRAFT HAZARDOUS WASTE POST-CLOSURE RENEWAL PERMIT

PIONEER AMERICAS, LLC/SAINT GABRIEL FACILITY AI Number 2644

VIEW ATTACHMENTS FOLLOWING PUBLIC NOTICE

The LDEQ, Office of Environmental Services, is accepting written comments on a draft hazardous waste post-closure renewal permit for Pioneer Americas, LLC, Post Office Box 23, St. Gabriel, Louisiana 70776-0023 for the St. Gabriel facility. **The facility is located at 4205 Highway 75, in St. Gabriel, Iberville Parish.**

Pioneer Americas, LLC requested a renewal of the hazardous waste post-closure permit for the management and post-closure care of the Ponds 1-4, Sulfide Pond, North and South Surge Ponds. The facility is a site where corrective action is taking place to recover and remediate contaminated groundwater. Recovery wells pump contaminated groundwater to a waste recovery system where it is treated and discharged to a Publicly Owned Treatment Works (POTW). The hazardous waste unit involved in this permit action treated and disposed of hazardous waste generated at the site. The hazardous waste unit is currently closed and requires a permit to govern post-closure care.

Written comments, written requests for a public hearing, or written requests for notification of the final decision regarding this permit action may be submitted to Ms. Soumaya Ghosn at LDEQ, Public Participation Group, P.O. Box 4313, Baton Rouge, LA 70821-4313. **Written comments and/or written requests must be received by 12:30 p.m., Monday, September 10, 2007.** Written comments will be considered prior to a final permit decision.

If LDEQ finds a significant degree of public interest, a public hearing will be held. LDEQ will send notification of the final permit decision to the applicant and to each person who has submitted written comments or a written request for notification of the final decision.

The draft hazardous waste post-closure renewal permit, fact sheet, the hazardous waste post-closure permit renewal application, and supporting documents are available for review at the LDEQ, Public Records Center, Room 127, 602 North 5th Street, Baton Rouge, LA. Viewing hours are from 8:00 a.m. to 4:30 p.m., Monday through Friday (except holidays). **The available information can also be accessed electronically through the Electronic Document Management System (EDMS) on the DEQ public website at www.deq.louisiana.gov.**

Parish /State

Page 1 of 1

Laura Ambeau

From: Debbie Cormier
Sent: Wednesday, July 18, 2007 1:33 PM
To: _DEQ-Sect-Public Participation
Subject: FW: A Public Notice Mailout to the public notice mailing list was completed 7/18/07

Email mailout completed 7-18-07

From: Debbie Cormier
Sent: Wednesday, July 18, 2007 1:32 PM
To: Angela Sylvester Fabre
Cc: Soumaya Ghosn; Renee Ethridge; Heather Manry; Chris Mayeux
Subject: A Public Notice Mailout to the public notice mailing list was completed 7/18/07

Angela's Email Public Notice

A Public Notice Mailout to the public notice mailing list was completed 7/18/07
 regarding the following facilities:

Pioneer Americas, LLC/St. Gabriel Facility
St. Gabriel, Iberville Parish, LA

On Copolymer Geismar, LLC/Geismar Facility
Geismar, Ascension Parish, LA

Parish/State	Printing Cost	Postage Cost	Number of Pieces	Comments
State	\$114.35	\$46.80	117	
Iberville	*	*	*	
Ascension	*	*	*	
Total*	\$26.80	\$78.34	268	2 notices mailed out together

7/19/2007

A Public Notice mailout to the facility mailing list was completed 10/15/03 regarding the following facili... Page 1 of 1

Laura Ambeau

From: Debbie Cormier
Sent: Wednesday, July 18, 2007 1:29 PM
To: _DEQ-Sect-Public Participation
Cc: Amy Exnicios; Toni Booker
Subject: A Public Notice mailout to the facility mailing list was completed July 18, 2007

A Public Notice mailout to the facility mailing list was completed July 18, 2007 regarding the following facilities:

Pioneer Americas, LLC/St. Gabriel Facility
St. Gabriel, Iberville Parish, LA

Lion Copolymer Geismar, LLC/Geismar Facility
Geismar, Ascension Parish, LA

Total Statewide Cost: \$114.35

Total Postage Cost: \$46.80

Parish	Printing Cost	Postage Cost
Iberville	\$22.20	\$59.94
Ascension	4.60	\$18.40

VERIFICATION BY LIBRARY

The undersigned verifies that the Ascension Parish Library, Gonzales Branch, has received a copy of the draft hazardous waste post-closure permit renewal and public notice associated with the following facility:

Re: REQUEST FOR PUBLIC COMMENT ON THE
DRAFT HAZARDOUS WASTE POST CLOSURE PERMIT RENEWAL
PIONEER AMERICAS, LLC, SAINT GABRIEL FACILITY
AJ NUMBER 2644, PERMIT NUMBER LAD 062 666 540-PC-RN-1, PER20010001

ASCENSION PARISH LIBRARY, GONZALES BRANCH:

By: 

Date: 7/19/07

Please complete and return this form promptly to the address listed below:

Ms. Laura Ambeau
Louisiana Department of Environmental Quality
Office of Environmental Services
Environmental Assistance Division
Post Office Box 4313
Baton Rouge, Louisiana 70821-4313
Phone (225) 219-3277

FAX (225) 325-8157

07/17/2007 23:15 2256428381

EASTIBERVILBRLIB

PAGE 03

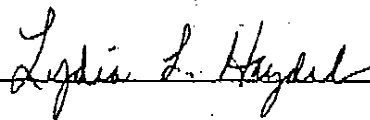
VERIFICATION BY LIBRARY

The undersigned verifies that the Iberville Parish Library, East Iberville Branch, has received a copy of the draft hazardous waste post-closure permit renewal and public notice associated with the following facility:

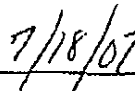
Re: REQUEST FOR PUBLIC COMMENT ON THE
DRAFT HAZARDOUS WASTE POST CLOSURE PERMIT RENEWAL
PIONEER AMERICAS, LLC, SAINT GABRIEL FACILITY
AI NUMBER 2644, PERMIT NUMBER LAD 062 666 540-PC-RN-1, PER20010001

IBERVILLE PARISH LIBRARY, EAST IBERVILLE BRANCH:

By: _____



Date: _____



Please complete and return this form promptly to the address listed below:

Ms. Laura Ambeau
Louisiana Department of Environmental Quality
Office of Environmental Services
Environmental Assistance Division
Post Office Box 4313
Baton Rouge, Louisiana 70821-4313
Phone (225) 219-3277

FAX (225) 325-8157

LAURA AMBEAU/3RD FLOOR/PPG

Is your RETURN ADDRESS completed on the reverse side?

SENDER:

- Complete Items 1 and/or 2 for additional services.
- Complete Items 3, 4a, and 4b.
- Print your name and address on the reverse of this form so that we can return this card to you.
- Attach this form to the front of the mailpiece, or on the back if space does not permit.
- Write "Return Receipt Requested" on the mailpiece below the article number.
- The Return Receipt will show to whom the article was delivered and the date delivered.

I also wish to receive the following services (for an extra fee):

1. ☐ Addressee's Address
2. ☐ Restricted Delivery

Consult postmaster for fee.

3. Article Addressed to:

**MR. DAVID A. GASPER
PIONEER AMERICAS, LLC
POST OFFICE BOX 23
ST. GABRIEL, LOUISIANA 70776**

4a. Article Number

7003 2260 0005 9323 0464

4b. Service Type

- ☐ Registered ☒ Certified
☐ Express Mail ☐ Insured
☒ Return Receipt for Merchandise ☐ OOD

7. Date of Delivery

DEC 24 2007

5. Received By: (Print Name)

Aisa Villar

6. Signature: (Addressee or Agent)

X Aisa Villar

8. Addressee's Address (Only if requested and fee is paid)

**PM
70776**

PS Form 3811, December 1994

Domestic Return Receipt

JUL 27 2007 8:13AM HP LASERJET FAX

p.2

2007 JUL 27 AM 11:19

VERIFICATION BY EPA

The undersigned verifies that the EPA Region VI Office has received a copy of the draft hazardous waste post-closure permit renewal and public notice regarding:

**Re: REQUEST FOR PUBLIC COMMENT ON THE
DRAFT HAZARDOUS WASTE POST CLOSURE PERMIT RENEWAL
PIONEER AMERICAS, LLC, SAINT GABRIEL FACILITY
AI NUMBER 2644, PERMIT NUMBER LAD 062 666 540-PC-RN-1, PER20010001**

EPA Region VI:By: Date: 7/27/07

Please complete and return this form promptly to the address listed below:

Ms. Laura Ambeau
Louisiana Department of Environmental Quality
Office of Environmental Services
Environmental Assistance Division
PO Box 4313
Baton Rouge, LA 70821-4313
Phone (225) 219-3277

FAX (225) 325-8157

8-06-2007 8:11AM

FROM IBERVILLE EMERG PREP 225 687 5227

P. 2

VERIFICATION BY PARISH GOVERNMENT

The undersigned verifies that the Parish President, Iberville Parish Council has received a copy of the draft hazardous waste post-closure permit renewal regarding:

Re: REQUEST FOR PUBLIC COMMENT ON THE
DRAFT HAZARDOUS WASTE POST CLOSURE PERMIT RENEWAL
PIONEER AMERICAS, LLC, SAINT GABRIEL FACILITY
AI NUMBER 2644, PERMIT NUMBER LAD 062 666 540-PC-RN-1, PER20010001

Iberville Parish Government:

By: John Jr. Clark Date: 8-1-07

Please complete and return this form promptly to the address listed below:

Ms. Laura Ambeau
Louisiana Department of Environmental Quality
Office of Environmental Services
Environmental Assistance Division
PO Box 4313
Baton Rouge, LA 70821-4313
PHONE (225) 219-3277
FAX (225) 325-8157

VERIFICATION FOR DELIVERY OF MATERIAL TO BE SCANNED

THIS INFORMATION IS EXPECTED TO BE AVAILABLE ON EDMS
48 HOURS FROM THE DELIVERY DATE

Public Notice Date: Thursday, July 19, 2007

The undersigned verifies that a copy of the draft hazardous waste post-closure permit renewal for the referenced facility has been received by the First Floor Scanning Center:

Re: REQUEST FOR PUBLIC COMMENT ON THE
DRAFT HAZARDOUS WASTE POST CLOSURE PERMIT RENEWAL
PIONEER AMERICAS, LLC, SAINT GABRIEL FACILITY
AI NUMBER 2644, PERMIT NUMBER LAD 062 666 540-PC-RN-1, PER20010001

FIRST FLOOR SCANNING CENTER:

The Material Was Delivered:

By: Larry Hebert Time 1:40 7/17/07 Date:

.....

The Public Participation Group contact for this packet of information is
Laura Ambeau, Rm. 321-31, 2-3277

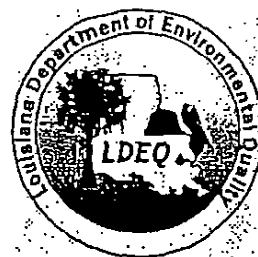
PART A

APPLICATION

WB#: 2050-0175

MAIL
COMPLETED FORM
TO:United States Environmental Protection Agency
and

STATE OF LOUISIANA

DEPARTMENT OF ENVIRONMENTAL QUALITY
NOTIFICATION OF HAZARDOUS WASTE ACTIVITY
RCRA SUBTITLE C SITE IDENTIFICATION FORMLDEQ/OES/
Environmental Assistance
Division/CAS
PO Box 4313
Baton Rouge, LA
70821-4313

Reason for Submittal

CHOOSE ONLY ONE
REASON
PER SUBMITTAL

A. Reason for Submittal:

- ☐ To provide initial notification (to obtain an EPA ID Number for hazardous waste, universal waste, or used oil activities).
- ☐ To provide subsequent notification (to update site identification information).
- or
- ☐ As a component of a First RCRA Hazardous Waste Part A Permit Application.
- ☒ As a component of a Revised RCRA Hazardous Waste Part A Permit Application (Amendment # _____).
- or
- ☐ As a component of the Hazardous Waste Report.

B. Number of Employees: 83 Pioneer employees & 50 Resident Contract Employees

Site EPA ID Number

EPA ID Number: LAD06266540

Site Name

Legal Name: Pioneer Americas LLC

Site Location
Physical address,
Street, Box or Route)

Street Address: 4205 Highway 75

City, Town, or Village: St Gabriel

State: Louisiana

County/Parish Name: Iberville

Zip Code: 70776-0023

Site Land Type

Site Land Type: ☒ Private ☐ County/Parish ☐ District ☐ Federal ☐ Indian ☐ Municipal ☐ State ☐ OtherNorth American
Industry Classification
System (NAICS) Code(s)

A. 325181

B.

C.

D.

Site Mailing Address

Street or P. O. Box: PO Box 23

City, Town, or Village: St Gabriel

State: Louisiana

County/Parish Name: Iberville

Zip Code: 70776-0023

Site Contact Person

First Name: Regina

MI: L

Last Name: Wilson

Phone Number: 225-642-1863

Phone Number Extension:

Legal Owner and
Operator of the Site (see
Instructions)

A. Name of Site's Legal Owner: Pioneer Americas LLC

Date Became Owner (mm/dd/yyyy): 12/25/1988

Owner Type: ☒ Private ☐ County/Parish ☐ District ☐ Federal ☐ Indian ☐ Municipal ☐ State ☐ OtherB. Name of Site's Operator:
Pioneer Americas LLC

Date Became Operator (mm/dd/yyyy): 12/25/1988

Operator Type: ☐ Private ☐ County/Parish ☐ District ☐ Federal ☐ Indian ☐ Municipal ☐ State ☐ Other

OMB#: 2050-0175

EPA ID No. L A D 0 6 9 5 2 4 9 8 1

Type of Regulated Waste Activity (Mark 'X' in the appropriate boxes)

Hazardous Waste Activities

1. Generator of Hazardous Waste

(Select one of the following categories)

☒ a. LQG: Greater than 1,000 kg/mo (2,200 lbs.)
Non-acute hazardous waste; or

☐ b. SQG: 100 to 1,000 kg/mo (220 - 2,200 lbs.)
Non-acute hazardous waste; or

☐ c. CESQG: Less than 100 kg/mo
Non-acute hazardous waste

☐ d. NON-GENERATOR

In addition, indicate other generator activities (check all that apply)

☐ e. United States Importer of Hazardous Waste

☐ f. Mixed Waste (hazardous and radioactive) Generator

For Items 2 through 6, check all that apply:

☐ 2. Transporter of Hazardous Waste

☐ Transfer Facility Status
(Transporter status must be indicated above)

☐ 3. Treater, Storer, or Disposer of HW (at your site)
Note: A hazardous waste permit is required for this activity.

☐ Permitted ☐ Interim Status ☐ Proposed

☒ 4. Recycler of Hazardous Waste (at your site)
Note: A hazardous waste permit may be required for this activity.

5. Exempt Boiler and/or Industrial Furnace

☐ a. Small Quantity On-site Burner Exemption
☐ b. Smelting, Melting, Refining Furnace Exemption

☐ 6. Underground Injection Control

B. Universal Waste Activities (Indicate Activity Type)

☐ 1. Large Quantity Handler of Universal Waste [refer to your State regulations to determine what is regulated]. Indicate types of universal waste generated and/or accumulated at your site. (check all boxes that apply):

	Generated	Accumulated
a. Batteries	<input type="checkbox"/>	<input type="checkbox"/>
b. Pesticides	<input type="checkbox"/>	<input type="checkbox"/>
c. Thermostats	<input type="checkbox"/>	<input type="checkbox"/>
d. Lamps	<input type="checkbox"/>	<input type="checkbox"/>
e. Antifreeze	<input type="checkbox"/>	<input type="checkbox"/>

☐ 2. Destination Facility for Universal Waste

Note: A hazardous waste permit may be required for this activity.

C. Used Oil Activities (Indicate Activity Type)

☐ 1. Used Oil Transporter

☐ a. Transporter
☐ b. Transfer Facility

☐ 2. Used Oil Processor and/or Re-refiner

☐ a. Processor
☐ b. Re-refiner

☐ 3. Off-Specification Used Oil Burner

☐ 4. Used Oil Fuel Marketer

☐ a. Marketer Who Directs Shipment of Off-Specification Used Oil to Off-Specification Used Oil Burner

☐ b. Marketer Who First Claims the Used Oil Meets the Specifications

☐ 5. Used Oil Fuel Burner
(Indicate Combustion Device(s))

☐ Utility Boiler ☐ Industrial Boiler ☐ Industrial Furnace

1. Description of Hazardous Wastes

Waste Codes for Federally Regulated Hazardous Wastes. Please list the waste codes of the Federal hazardous wastes handled at your site. List them in the order they are presented in the regulations (e.g., D001, D003, F007, U112). Use an additional page if more spaces are needed.

001	D002	D003	D009	D0035	F003	F005
371	K106	P096				

OMB #: 2050-0034 Expires 10/31/02

United States Environmental Protection Agency
HAZARDOUS WASTE PERMIT INFORMATION FORM

1. Facility Permit Contact (See Instructions on page 35)	First Name: Regina		MI: L.	Last Name: Wilson	
	Phone Number: 225-642-1863			Phone Number Extension:	
2. Facility Permit Contact Mailing Address (See Instructions on page 35)	Street or P.O. Box: PO Box 23				
	City, Town, or Village: St. Gabriel				
	State: Louisiana				
	Country: United States			Zip Code: 70776	
3. Legal Owner Mailing Address and Telephone Number (See Instructions on page 36)	Street or P.O. Box: 4300 NCNB BLDG 700 Louisiana				
	City, Town, or Village: Houston				
	State: Texas				
	Country: United States		Zip Code: 77002		Phone Number: 713-225-3831
4. Operator Mailing Address and Telephone Number (See Instructions on page 36)	Street or P.O. Box: PO Box 23				
	City, Town, or Village: St. Gabriel				
	State: Louisiana				
	Country: United States		Zip Code: 70776		Phone Number:
Facility Existence Date (See Instructions on page 36)	Facility Existence Date (mm/dd/yyyy): 12/26/1970				

Other Environmental Permits (See Instructions on page 36)

A. Permit Type (Enter code)	B. Permit Number	C. Description
N R E	LA0005231 LAD062666540 1280-00011-02	State LPDES Permit State RCRA Post-Closure Permit State Air Permit

Nature of Business (Provide a brief description; see Instructions on page 37)

Production of chlorine and sodium hydroxide by electrolysis of brine using the mercury cell process

OMB #: 2050-0034 Expires 10/31/02

Process Codes and Design Capacities (See instructions on page 37)

A. PROCESS CODE - Enter the code from the list of process codes below that best describes each process to be used at the facility. Thirteen lines are provided for entering codes. If more lines are needed, attach a separate sheet of paper with the additional information. For "other" processes (i.e., D99, S99, T04 and X99), describe the process (including its design capacity) in the space provided in Item 9.

B. PROCESS DESIGN CAPACITY - For each code entered in column A, enter the capacity of the process.

1. AMOUNT - Enter the amount. In a case where design capacity is not applicable (such as in a closure/post-closure or enforcement action) enter the total amount of waste for that process.
2. UNIT OF MEASURE - For each amount entered in column B(1), enter the code in column B(2) from the list of unit of measure codes below that describes the unit of measure used. Select only from the units of measure in this list.

C. PROCESS TOTAL NUMBER OF UNITS - Enter the total number of units for each corresponding process code.

PROCESS CODE	PROCESS	APPROPRIATE UNITS OF MEASURE FOR PROCESS DESIGN CAPACITY	PROCESS CODE	PROCESS	APPROPRIATE UNITS OF MEASURE FOR PROCESS DESIGN CAPACITY
D79	Disposal		T81	Cement Kiln	Gallons Per Day; Liters Per Day; Pounds Per Hour; Short Tons Per Hour; Kilograms Per Hour; Metric Tons Per Day; Metric Tons Per Hour; Short Tons Per Day; Short Tons Per Hour; Million Btu Per Hour
D81	Landfill	Acres-foot; Backyard-meter; Acres; Cubic Meters; Backyard Cubic Yards	T82	Lime Kiln	Gallons Per Day; Liters Per Day; Pounds Per Hour; Short Tons Per Hour; Kilograms Per Hour; Metric Tons Per Day; Metric Tons Per Hour; Short Tons Per Day; Short Tons Per Hour; Million Btu Per Hour
D82	Land Treatment	Acres or Backyard	T83	Aggregate Kiln	For Hour; Metric Tons Per Day; Metric Tons Per Hour; Short Tons Per Day; Short Tons Per Hour; Million Btu Per Hour
D83	Ocean Disposal	Gallons Per Day or Liters Per Day	T84	Phosphate Kiln	For Hour; Metric Tons Per Day; Metric Tons Per Hour; Short Tons Per Day; Short Tons Per Hour; Million Btu Per Hour
D84	Surface Impoundment Disposal	Gallons; Liters; Cubic Meters; or Cubic Yards	T85	Coke Oven	Gallons Per Day; Liters Per Day; Pounds Per Hour; Short Tons Per Hour; Kilograms Per Hour; Metric Tons Per Day; Metric Tons Per Hour; Short Tons Per Day; Short Tons Per Hour; Million Btu Per Hour
D99	Other Disposal	Any Unit of Measure Listed Below	T86	Black Furnace	Gallons Per Day; Liters Per Day; Pounds Per Hour; Short Tons Per Hour; Kilograms Per Hour; Metric Tons Per Day; Metric Tons Per Hour; Short Tons Per Day; Short Tons Per Hour; Million Btu Per Hour
S81	Storage		T87	Smelting, Melting, or Refining Furnace	Gallons Per Day; Liters Per Day; Pounds Per Hour; Short Tons Per Hour; Kilograms Per Hour; Metric Tons Per Day; Metric Tons Per Hour; Short Tons Per Day; Short Tons Per Hour; Million Btu Per Hour
S82	Container	Gallons; Liters; Cubic Meters; or Cubic Yards	T88	Titanium Dioxide	Gallons Per Day; Liters Per Day; Pounds Per Hour; Short Tons Per Hour; Kilograms Per Hour; Metric Tons Per Day; Metric Tons Per Hour; Short Tons Per Day; Short Tons Per Hour; Million Btu Per Hour
S83	Tank Storage	Gallons; Liters; Cubic Meters; or Cubic Yards	T89	Chloride Oxidation Reactor	Gallons Per Day; Liters Per Day; Pounds Per Hour; Short Tons Per Hour; Kilograms Per Hour; Metric Tons Per Day; Metric Tons Per Hour; Short Tons Per Day; Short Tons Per Hour; Million Btu Per Hour
S84	Waste Pile	Cubic Yards or Cubic Meters	T90	Methane Reforming Furnace	Gallons Per Day; Liters Per Day; Pounds Per Hour; Short Tons Per Hour; Kilograms Per Hour; Metric Tons Per Day; Metric Tons Per Hour; Short Tons Per Day; Short Tons Per Hour; Million Btu Per Hour
S85	Surface Impoundment Storage	Gallons; Liters; Cubic Meters; or Cubic Yards	T91	Pulping Liquor Recovery Furnace	Gallons Per Day; Liters Per Day; Pounds Per Hour; Short Tons Per Hour; Kilograms Per Hour; Metric Tons Per Day; Metric Tons Per Hour; Short Tons Per Day; Short Tons Per Hour; Million Btu Per Hour
S86	Drip Pad	Gallons; Liters; Acres; Cubic Meters; Backyard; or Cubic Yards	T92	Combustion Device Used in The Recovery Of Sulfur Yields From Spent Sulfuric Acid	Gallons Per Day; Liters Per Day; Pounds Per Hour; Short Tons Per Hour; Kilograms Per Hour; Metric Tons Per Day; Metric Tons Per Hour; Short Tons Per Day; Short Tons Per Hour; Million Btu Per Hour
S87	Containment Building Storage	Cubic Yards or Cubic Meters	T93	Bioleak Acid Furnace	Gallons Per Day; Liters Per Day; Pounds Per Hour; Short Tons Per Hour; Kilograms Per Hour; Metric Tons Per Day; Metric Tons Per Hour; Short Tons Per Day; Short Tons Per Hour; Million Btu Per Hour
S99	Other Storage	Any Unit of Measure Listed Below	T94	Other Industrial Furnaces Listed in 48 CFR 126.16	Gallons Per Day; Liters Per Day; Pounds Per Hour; Short Tons Per Hour; Kilograms Per Hour; Metric Tons Per Day; Metric Tons Per Hour; Short Tons Per Day; Short Tons Per Hour; Million Btu Per Hour
T81	Treatment		T95	Containment Building - Treatment	Cubic Yards; Cubic Meters; Short Tons Per Hour; Gallons Per Hour; Liters Per Hour; Btu Per Hour; Pounds Per Hour; Short Tons Per Day; Kilograms Per Hour; Metric Tons Per Day; Kilograms Per Hour; Liters Per Day; Metric Tons Per Day; Metric Tons Per Hour; or Million Btu Per Hour
T82	Surface Impoundment Treatment	Gallons Per Day; Liters Per Day; Short Tons Per Hour; Gallons Per Hour; Liters Per Hour; Pounds Per Hour; Short Tons Per Day; Kilograms Per Hour; Metric Tons Per Day; Metric Tons Per Hour; Short Tons Per Day; Short Tons Per Hour; Million Btu Per Hour		Miscellaneous (Subpart X)	
T83	Incinerator	Short Tons Per Hour; Metric Tons Per Hour; Gallons Per Hour; Liters Per Hour; Btu Per Hour; Pounds Per Hour; Short Tons Per Day; Kilograms Per Hour; Metric Tons Per Day; Kilograms Per Hour; Liters Per Day; Metric Tons Per Day; Metric Tons Per Hour; Short Tons Per Day; Short Tons Per Hour; Million Btu Per Hour	X81	Open Burning/Open Detonation	Any Unit of Measure Listed Below
T84	Other Treatment	Gallons Per Day; Liters Per Day; Pounds Per Hour; Short Tons Per Hour; Kilograms Per Hour; Metric Tons Per Day; Metric Tons Per Hour; Short Tons Per Day; Short Tons Per Hour; Million Btu Per Hour	X82	Mechanical Processing	Short Tons Per Hour; Metric Tons Per Hour; Short Tons Per Day; Metric Tons Per Day; Pounds Per Hour; Kilograms Per Hour; Gallons Per Hour; Liters Per Hour; or Gallons Per Day
T85	Beller	Gallons; Liters; Gallons Per Hour; Liters Per Hour; Btu Per Hour; or Million Btu Per Hour	X83	Thermal Unit	Gallons Per Day; Liters Per Day; Pounds Per Hour; Short Tons Per Hour; Kilograms Per Hour; Metric Tons Per Day; Metric Tons Per Hour; Short Tons Per Day; Short Tons Per Hour; Million Btu Per Hour
			X84	Geologic Repository	Cubic Yards; Cubic Meters; Acres-foot; Backyard-meter; Gallons; or Liters
			X85	Other Subpart X	Any Unit of Measure Listed Below

UNIT OF MEASURE	UNIT OF MEASURE CODE	UNIT OF MEASURE	UNIT OF MEASURE CODE	UNIT OF MEASURE	UNIT OF MEASURE CODE
Gallons	G	Short Tons Per Hour	D	Cubic Yards	Y
Per Hour	H	Metric Tons Per Hour	W	Cubic Meters	C
Per Day	U	Short Tons Per Day	N	Acres	A
	L	Metric Tons Per Day	S	Acres-foot	F
Liters Per Hour	M	Pounds Per Hour	J	Backyard-meter	B
Liters Per Day	V	Kilograms Per Hour	K	Backyard-meter	P
		Million Btu Per Hour	X	Btu Per Hour	I

Process Codes and Design Capacities (Continued)

EXAMPLE FOR COMPLETING Item 8 (shown in line number X-1 below): A facility has a storage tank, which can hold 533,788 gallons.

Line Number	A. Process Code (From list above)	B. PROCESS DESIGN CAPACITY		C. Process Total Number of Units	D. Description of Process
		(1) Amount (Specify)	(2) Unit of Measure (Enter code)		
X 1	S 0 2	5 3 3 . 7 8 8	G	0 0 1	For Official Use Only
1		Not applicable. All units are currently in the post-closure period. See Table 1 of the permit renewal application for a list of units, hazardous wastes contained in the closed units, and processes used when the units were operational.			
2					
3					
4					
5					
6					
7					
8					
9					
1 0					
1 1					
1 2					
1 3					

NOTE: If you need to list more than 13 process codes, attach an additional sheet(s) with the information in the same format as above. Number the lines sequentially, taking into account any lines that will be used for "other" processes (i.e., D99, S99, T04 and X99) in Item 9.

Other Processes (See instructions on page 37 and follow instructions from Item 8 for D99, S99, T04 and X99 process codes)

N/A

Line Number (Enter in sequence with Item 8)	A. Process Code (From list above)	B. PROCESS DESIGN CAPACITY		C. Process Total Number of Units	D. Description of Process
		(1) Amount (Specify)	(2) Unit of Measure (Enter code)		
X 1	T 0 4				In-situ Vitrification
1					
2					
3					
4					

Description of Hazardous Wastes (See Instructions on page 37)

- A. EPA HAZARDOUS WASTE NUMBER** - Enter the four-digit number from 40 CFR, Part 261 Subpart D of each listed hazardous waste you will handle. For hazardous wastes which are not listed in 40 CFR, Part 261 Subpart D, enter the four-digit number(s) from 40 CFR Part 261, Subpart C that describes the characteristics and/or the toxic contaminants of those hazardous wastes.
- B. ESTIMATED ANNUAL QUANTITY** - For each listed waste entered in column A, estimate the quantity of that waste that will be handled on an annual basis. For each characteristic or toxic contaminant entered in column A, estimate the total annual quantity of all the non-listed waste(s) that will be handled which possess that characteristic or contaminant.
- C. UNIT OF MEASURE** - For each quantity entered in column B, enter the unit of measure code. Units of measure which must be used and the appropriate codes are:

ENGLISH UNIT OF MEASURE	CODE	METRIC UNIT OF MEASURE	CODE
POUNDS	P	KILOGRAMS	K
TONS	T	METRIC TONS	M

If facility records use any other unit of measure for quantity, the units of measure must be converted into one of the required units of measure, taking into account the appropriate density or specific gravity of the waste.

D. PROCESSES

1. PROCESS CODES:

For listed hazardous waste: For each listed hazardous waste entered in column A select the code(s) from the list of process codes contained in Items 8A and 9A on page 3 to indicate the waste will be stored, treated, and/or disposed at the facility.

For non-listed hazardous waste: For each characteristic or toxic contaminant entered in column A, select the code(s) from the list of process codes contained in Items 8A and 9A on page 3 to indicate all the processes that will be used to store, treat, and/or dispose of all the non-listed hazardous wastes that possess that characteristic or toxic contaminant.

NOTE: THREE SPACES ARE PROVIDED FOR ENTERING PROCESS CODES. IF MORE ARE NEEDED:

- Enter the first two as described above.
- Enter "000" in the extreme right box of Item 10.D(1).
- Use additional sheet, enter line number from previous sheet, and enter additional code(s) in Item 10.E

2. PROCESS DESCRIPTION: If a code is not listed for a process that will be used, describe the process in Item 10.D(2) or in Item 10.E(2).

NOTE: HAZARDOUS WASTES DESCRIBED BY MORE THAN ONE EPA HAZARDOUS WASTE NUMBER - Hazardous wastes that can be described by more than one EPA Hazardous Waste Number shall be described on the form as follows:

- Select one of the EPA Hazardous Waste Numbers and enter it in column A. On the same line complete columns B, C and D by estimating the total annual quantity of the waste and describing all the processes to be used to treat, store, and/or dispose of the waste.
- In column A of the next line enter the other EPA Hazardous Waste Number that can be used to describe the waste. In column D(2) on that line enter "Included with above" and make no other entries on that line.
- Repeat step 2 for each EPA Hazardous Waste Number that can be used to describe the hazardous waste.

EXAMPLE FOR COMPLETING Item 10 (shown in line numbers X-1, X-2, X-3, and X-4 below) - A facility will treat and dispose of an estimated 900 pounds per year of chrome shavings from leather tanning and finishing operations. In addition, the facility will treat and dispose of three non-listed wastes. Two wastes are corrosive only and there will be an estimated 200 pounds per year of each waste. The other waste is corrosive and ignitable and there will be an estimated 100 pounds per year of that waste. Treatment will be in an incinerator and disposal will be in a landfill.

Line Number	A. EPA Hazardous Waste No. (Enter code)	B. Estimated Annual Quantity of Waste	C. Unit of Measure (Enter code)	D. PROCESSES			
				(1) PROCESS CODES (Enter code)		(2) PROCESS DESCRIPTION (If a code is not entered in D(1))	
X 1	K 0 5 4	900	P	T 0 3	D 8 0		
X 2	D 0 0 2	400	P	T 0 3	D 8 0		
X 3	D 0 0 1	100	P	T 0 3	D 8 0		
X 4	D 0 0 2						Included With Above

OMB #: 2050-0034 Expires 10/31/02

Description of Hazardous Wastes (Continued; use additional sheets as necessary)

See Table 1

Line Number	A. EPA Hazardous Waste No. (Enter code)	B. Estimated Annual Quantity of Waste	C. Unit of Measure (Enter code)	D. PROCESSES			
				(1) PROCESS CODES (Enter code)			(2) PROCESS DESCRIPTION (If a code is not entered in D(1))
1							
2							
3							
4							
5							
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							
23							
24							
25							
26							
27							
28							
29							
30							
31							
32							
33							

See Figures 1-3

12. Facility Drawing (See instructions on page 39)

See Figure 3

13. Photographs (See Instructions on page 39)

See Appendix E

14. Comments (See instructions on page 39)

TABLE OF CONTENTS

TABLE OF CONTENTS

I.	PERMIT PREAMBLE.....	1
II.	GENERAL PERMIT CONDITIONS.....	5
	II.A. DURATION OF PERMIT	5
	II.B. EFFECT OF PERMIT	5
	II.C. PERMIT ACTIONS	5
	II.D. SEVERABILITY	5
	II.E. DUTIES AND REQUIREMENTS	6
III.	GENERAL POST-CLOSURE CONDITIONS	16
	III.A. DESIGN AND OPERATION OF THE POST-CLOSURE UNIT	16
	III.B. REQUIRED NOTICE.....	16
	III.C. GENERAL WASTE ANALYSIS.....	16
	III.D. SECURITY.....	17
	III.E. GENERAL INSPECTION REQUIREMENTS	17
	III.F. PERSONNEL TRAINING.....	17
	III.G. GENERAL REQUIREMENTS FOR IGNITABLE, REACTIVE, OR INCOMPATIBLE WASTE.....	17
	III.H. LOCATION STANDARDS.....	17
	III.I. PRECIPITATION RUN-ON AND RUN-OFF.....	17
	III.J. HURRICANE EVENTS	18
	III.K. PREPAREDNESS AND PREVENTION	18
	III.L. CONTINGENCY PLAN.....	18
	III.M. MANIFEST SYSTEM.....	19
	III.N. RECORD KEEPING AND REPORTING	19
	III.O. POST-CLOSURE.....	19
	III.P. COST ESTIMATE FOR CARE OF THE POST-CLOSURE UNIT	21
	III.Q. FINANCIAL ASSURANCE FOR THE POST-CLOSURE UNIT	21
	III.R. LIABILITY REQUIREMENTS	21
	III.S. INCAPACITY OF THE PERMITTEE.....	21
	III.T. POST-CLOSURE NOTICES	21
IV.	PERMITTED CLOSED UNITS	22
V.	PERMIT CONDITIONS APPLICABLE TO PERMITTED CLOSED UNITS	22
	V.A. POST-CLOSURE CARE PERIOD.....	22
	V.B. POST-CLOSURE MAINTENANCE.....	23
	V.C. POST-CLOSURE RESTRICTIONS.....	23
	V.D. POST-CLOSURE USE OF PROPERTY	24
VI.	GROUNDWATER PROTECTION	26
	VI.A. APPLICABILITY	26
	VI.B. REQUIRED PROGRAMS.....	26
	VI.C. GROUNDWATER PROTECTION STANDARD	27
	VI.D. HAZARDOUS CONSTITUENTS, PARAMETERS, ANALYTICAL FREQUENCY AND CONCENTRATION LIMITS	27
	VI.E. POINT OF COMPLIANCE	31
	VI.F. COMPLIANCE PERIOD.....	31
	VI.G. GENERAL REQUIREMENTS	31
	VI.H. DETECTION MONITORING PROGRAM	34

VI.I.	COMPLIANCE MONITORING PROGRAM	34
VI.J.	CORRECTIVE ACTION PROGRAM.....	38
VI.K.	CONSTRUCTION AND ABANDONMENT OF MONITORING WELLS AND GEOTECHNICAL BOREHOLES.....	41
VI.L.	REPORTING AND NOTIFICATION REQUIREMENTS.....	41
VII.	GENERAL CONDITIONS PURSUANT TO THE HAZARDOUS AND SOLID WASTE AMENDMENTS.....	44
VII.A.	STANDARD CONDITIONS	44
VII.B.	EMISSION STANDARDS - PROCESS VENTS, EQUIPMENT LEAKS, TANKS, SURFACE IMPOUNDMENTS, AND CONTAINERS (AA-BB AIR REGULATIONS ..	48
VII.C.	SPECIFIC CONDITION -CLOSURE.....	48
VIII.	SPECIAL CONDITIONS PURSUANT TO HAZARDOUS AND SOLID WASTE AMENDMENTS - CORRECTIVE ACTION STRATEGY.....	49
VIII.A.	ALTERNATIVE CORRECTIVE ACTION	49
VIII.B.	PROJECT DEVELOPMENT AND SCOPING MEETING	54
VIII.C.	REPORTING REQUIREMENTS.....	55
VIII.D.	SPECIFIC CONDITION CONCEPTUAL SITE MODEL (CSM).....	56
VIII.E.	INTERIM MEASURES.....	61
VIII.F.	CAS (CORRECTIVE ACTION STRATEGY) INVESTIGATION WORKPLAN	63
VIII.G.	IMPLEMENTATION OF SITE INVESTIGATION ACTIVITIES UNDER CAS.....	65
VIII.H.	RECAP REPORT.....	65
VIII.I.	REMEDIAL ALTERNATIVES STUDY	66
VIII.J.	RISK MANAGEMENT PLAN	67
VIII.K.	DETERMINATION OF NO FURTHER ACTION	69
VIII.L.	NOTIFICATION REQUIREMENTS FOR AND ASSESSMENT OF NEWLY IDENTIFIED SWMUs AND POTENTIAL AOCs	71
VIII.M.	NOTIFICATION REQUIREMENTS FOR NEWLY-DISCOVERED RELEASES AT A SWMU OR AOC	72
VIII.N.	PUBLIC PARTICIPATION REQUIREMENTS.....	73
	APPENDIX I.....	77

LIST OF ATTACHMENTS

ATTACHMENT 1 LIST OF FACILITY DOCUMENTS

BODY OF PERMIT

**FINAL
HAZARDOUS WASTE POST-CLOSURE RENEWAL PERMIT**

**PIONEER AMERICAS LLC
EPA ID# LAD 062666540
St. Gabriel, Louisiana
Iberville Parish**

**Agency Interest # 2644
PER20010001
PERMIT # LAD 062666540 PC-RN -1**

I. PERMIT PREAMBLE

This permit is issued to Pioneer Americas LLC, St. Gabriel, Iberville Parish, Louisiana, LAD 062 666 540 (from hereafter referred to as the permittee) by the Louisiana Department of Environmental Quality (LDEQ) under authority of the Louisiana Hazardous Waste Control Law, La. R.S. 30:2171 et seq., and the regulations adopted thereunder.

For the purposes of the permit, "Administrative Authority" shall mean the Secretary of the Department of Environmental Quality, or his/her designee.

This permit is based on information submitted in the permit application, and all subsequent amendments, and on the applicant's certification that such information is accurate and that all facilities were or will be maintained and operated as specified in the application.

This permit is conditioned upon full compliance with all applicable provisions of the Louisiana Hazardous Waste Control Law, R.S. 30:2171 et. seq., and the regulations adopted thereunder.

GLOSSARY OF TERMS

For the purpose of this Permit, terms used herein shall have the same meaning as those in LAC 33:V.Subpart 1 unless the context of use in this Permit clearly indicates otherwise. Where terms are not otherwise defined, the meaning otherwise associated with such terms shall be as defined by a standard dictionary reference or the generally accepted scientific or industrial meaning of the term.

“Administrative Authority” means the Louisiana Department of Environmental Quality (LDEQ).

“Application” refers to the RCRA Part B Permit Application and subsequent amendments submitted by the Permittee for obtaining a Permit.

“Area of Concern” (AOC) means any discernable unit or area which, in the opinion of the Administrative Authority, may have received solid or hazardous waste or waste containing hazardous constituents at any time. The Administrative Authority may require investigation of the unit to determine if it is a Solid Waste Management Unit (SWMU). If shown to be a SWMU by the investigation, the AOC must be reported by the Permittee as a newly-identified SWMU. If the AOC is shown not to be a SWMU by the investigation, the Administrative Authority may determine that no further action is necessary and notify the Permittee in writing.

“Area of Investigation” (AOI) is a zone contiguous to and including impacted media defined vertically and horizontally by the presence of one or more constituents in concentrations exceeding the limiting SS, MO-1 RS, or MO-2 RS (depending on the option being implemented).

“Beneficial Resource” describes natural resources that are useful to human and ecological receptors. The state may establish statutes or regulations that identify certain environmental components, such as specific ground water or surface water sources, as a “Special Beneficial Resource,” or “Designated Beneficial Resource.” The beneficial resources then may be entitled to greater protection from contamination.

“Constituents of Concern” (COC) means the COPC’s that pose a significant risk.

“Constituents of Potential Concern” (COPC) means chemicals from hazardous waste and hazardous waste constituents that are potentially site related and have data of quality for use in the Screen or a site-specific risk assessment. The facility should compile a list of COPC’s for each release site based on existing sampling data, waste analysis reports, etc.

“Conceptual Site Model” (CSM) is part of the Data Quality Objective (DQO) process that presents a three-dimensional picture of site conditions at a discrete point in time that conveys what is known about the facility, releases, release mechanisms, contaminant fate and transport, exposure pathways, potential receptors, and risks. The information for the CSM is documented into six profiles. The CSM evolves as data gaps in the profiles become more complete, and will be refined based upon results of site characterization data. The final CSM is documented in the Risk Management Plan (RMP).

“CWA” means Clean Water Act.

“Corrective Action” is an activity conducted to protect human health and the environment.

“DNAPL” (Dense Non-Aqueous Phase Liquid) a dense liquid not dissolved in water, commonly referred to as “free product.”

“Department” means the Louisiana Department of Environmental Quality (LDEQ).

“EPA” means the United States Environmental Protection Agency.

“HSWA” means the 1984 Hazardous and Solid Waste Amendments to RCRA.

“Hazardous Constituent” means any constituent identified in LAC 33:V.Chapter 31, Table 1, or any constituent identified in LAC 33:V.3325, Table 4.

“LDEQ” means the Louisiana Department of Environmental Quality.

“LNAPL” (Light Dense Non-Aqueous Phase Liquid) a light liquid not dissolved in water, commonly referred to as “free product.”

“Operating Record” means written or electronic records of all maintenance, monitoring, inspection, calibration, or performance testing—or other data as may be required—to demonstrate compliance with this Permit, document noncompliance with this Permit, or document actions taken to remedy noncompliance with this Permit. A minimum list of documents that must be included in the operating record are identified at LAC 33:V.1529.B.

“Permittee” means Pioneer Americas, LLC, 4205 Highway 75, St. Gabriel, Louisiana 70776.

“RCRA Permit” means the full permit, with RCRA and HSWA portions.

“RFA” means RCRA Facility Assessment.

“RFI” means RCRA Facility Investigation.

“Release” means any spilling, leaking, pouring, emitting, emptying, discharging, injecting, pumping, escaping, leaching, dumping or disposing of hazardous wastes (including hazardous constituents) into the environment (including the abandonment or discarding of barrels, containers, and other closed receptacles containing hazardous wastes or hazardous constituents).

“SARA” means Superfund Amendments and Reauthorization Action of 1986.

“Solid Waste Management Unit” (SWMU) means any discernable unit at which solid wastes have been placed at any time, irrespective of whether the unit was intended for the management of solid or hazardous waste. Such units include any area at a facility at which solid wastes have been routinely and systematically released.

“Stabilization” is an action taken for the purpose of controlling or abating threats to human health or the environment from releases or preventing or minimizing the further spread of contaminants while long-term remedies are pursued.

If, subsequent to the issuance of this Permit, regulations are promulgated which redefine any of the above terms, the Administrative Authority may, at its discretion, apply the new definition to the “Glossary of Terms”.

All regulating citations are defined as being the regulations in effect on the date of issuance of this permit. New and/or amended regulations are not included as Permit requirements until permit modification procedures as specified in Condition II.C. of the permit and LAC 33:V.321 are completed.

II. GENERAL PERMIT CONDITIONS

II.A. DURATION OF PERMIT

This permit is effective as of the date indicated on the accompanying signature page and shall remain in effect for a maximum period of ten (10) years from the effective date, unless suspended, modified, revoked and reissued or terminated for just cause.

II.B. EFFECT OF PERMIT

This permit authorizes the Permittee to conduct post-closure care activities associated with the North Surge Pond, South Surge Pond, Sulfide Pond, Sludge Ponds 1, 2, 3, and 4 in accordance with the conditions of this permit. The Permittee is prohibited from any storage, treatment or disposal of hazardous waste not authorized by statute, regulation or this permit. Compliance with this permit, LAC 33:V.Subpart I and HSWA, constitutes compliance for purposes of enforcement, with Subtitle C of RCRA and Chapter 9 of the Louisiana Environmental Quality Act (Act). However, compliance with the terms of this permit does not constitute a defense to any order issued or any action brought under Section 3013 or Section 7003 of RCRA, or under Section 106 (a) of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) {42 U.S.C. 9606 (a)}.

In accordance with LAC 33:V.307.B and C, issuance of this permit does not convey property rights of any sort or any exclusive privilege; nor does it authorize any injury to persons or property, any invasion of other private rights, or any infringement of State or local law or regulations.

II.C. PERMIT ACTIONS

Any inaccuracies found in the permit application may be cause for revocation or modification of this permit. The Permittee must inform the Administrative Authority of any deviation from, changes or inaccuracies in the information in the permit application.

The Administrative Authority may also suspend, modify, revoke and reissue, or terminate for cause when necessary to be protective of human health or the environment as specified in 40 CFR 270.41, 270.42, 270.43 or LAC 33:V.309.F, 311.A or 323. The Administrative Authority may modify the permit when the standards or regulations on which the permit was based have been changed by promulgation of amended standards or regulation, or by judicial decision after the permit was issued. The filing of a request for permit modification, revocation and reissuance, or termination or the notification of planned changes or anticipated noncompliance on the part of Permittee does not stay the applicability or enforceability of any permit condition.

II.D. SEVERABILITY

The conditions of this permit are severable and if any provision of this permit or the application of any provision of this permit to any circumstance is held invalid, the application of such provision to other circumstances and the remainder of this permit shall not be affected thereby.

II.E. DUTIES AND REQUIREMENTS

II.E.1. Duty to Comply

The Permittee shall comply with all conditions of this permit, except to the extent and for the duration such noncompliance may be authorized by an emergency permit. Any permit noncompliance, other than noncompliance authorized by an emergency permit (LAC 33:V.701), constitutes a violation of the LAC 33:V.Subpart I and the Environmental Quality Act and is grounds for enforcement action which may include permit termination, permit revocation and reissuance, permit modification, or denial of permit renewal application.

II.E.2. Duty to Reapply

If the Permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the Permittee must reapply for the permit as required by the LAC 33:V.303.N and 309.B. Notification shall be at least 180 calendar days before the permit expires.

II.E.3. Permit Extension

This permit and all conditions herein will remain in effect beyond the permit's expiration date until the Administrative Authority issues a final decision on the re-application, provided the Permittee has submitted a timely, complete new permit application as provided in LAC 33:V.309.B and 315.A.

II.E.4. Need to Halt or Reduce Activity Not a Defense

It shall not be a defense for the Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

II.E.5. Duty to Mitigate

The Permittee shall immediately take all reasonable steps to minimize or correct any adverse impact on the environment resulting from noncompliance with this permit as required by LAC 33:V.309.D.

II.E.6. Proper Operation and Maintenance

The Permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related ancillary equipment) that are installed or used by the Permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance includes effective performance, adequate funding, adequate operator staffing and training, and adequate laboratory and process controls, including appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems only when necessary to achieve compliance with the conditions of the permit.

II.E.7. Duty to Provide Information

The Permittee shall furnish to the Administrative Authority, within a reasonable time, any information which the Administrative Authority may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The Permittee shall also furnish to the Administrative Authority upon request, copies of records required by this permit.

II.E.8. Inspection and Entry

The Permittee shall allow the Administrative Authority or an authorized representative, upon the presentation of credentials and other documents as may be required by law, to:

- II.E.8.a.** enter upon the Permittee's premises where a regulated activity is located or conducted, or where records must be maintained under the conditions of this permit;
- II.E.8.b.** have access to and copy, at reasonable times, any records that must be maintained under the conditions of this permit;
- II.E.8.c.** inspect, at reasonable times, any facilities, equipment (including monitoring and control equipment), practices, or operation regulated or required under this permit; and
- II.E.8.d.** sample or monitor, at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by the Administrative Authority any substances or parameters at any location.

II.E.9. Sample Monitoring and Records

II.E.9.a. Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity. The method used to obtain a representative sample of the waste to be analyzed must be the appropriate method from Appendix I of 40 CFR Part 261. Laboratory methods must be those specified in Test Methods for Evaluating Solid Waste: Physical/Chemical Methods, "SW-846", latest revision; Manual of Ground Water Quality Sampling Procedures, 1981, EPA-600/2-81-160, as revised; Procedures Manual for Ground Water Monitoring at Solid Waste Disposal Facilities, 1977, EPA-530/SW-611, as revised; or an equivalent method.

II.E.9.b. Records of monitoring information shall include:

II.E.9.b.(1) the date, exact place, and time of sampling or measurements;

II.E.9.b.(2) the name(s) and signature(s) of the individual(s) who performed the sampling or measurements;

II.E.9.b.(3) the date(s) analyses were performed;

II.E.9.b.(4) the name(s) and signature(s) of the individual(s) who performed the analyses;

II.E.9.b.(5) the analytical techniques or methods used;

II.E.9.b.(6) the results of such analyses; and

II.E.9.b.(7) associated quality assurance performance data.

II.E.9.c. Laboratory Quality Assurance/Quality Control

In order to ensure the accuracy, precision, and reliability of data generated for use, the Permittee shall submit a statement, certified as specified in LAC 33:V.513 and included in the annual report, indicating that:

II.E.9.c.(1) any commercial laboratory providing analytical results and test data to the Department required by this permit is accredited by the Louisiana Environmental Laboratory Accreditation Program (LELAP) in accordance with LAC 33:I. Subpart 3, Chapter 45. Laboratory data generated by commercial laboratories not accredited under LELAP will not be accepted by the Department.

LAC 33:I. Subpart 3 (Chapters 45-49) provides requirements for the accreditation program. Regulations and a list of labs that have applied for accreditation are available on the LDEQ website: <http://www.deq.louisiana.gov/portal/tabid/2412/Default.aspx>.

In accordance with LAC 33:I.4501, the requirements for LELAP accreditation applies whenever data is:

- submitted on behalf of a facility;
- required as part of a permit application;
- required by order of the Department;
- required to be included in a monitoring report submitted to the Department;
- required to be submitted by contract; or
- otherwise required by the Department regulations.

This includes, but is not limited to data from RCRA Title Burns, Risk Burns, Risk Assessments, MACT Comprehensive Performance Tests, and data used for continuing compliance demonstrations.

II.E.9.c.(2) If the Permittee decides to use their own in-house laboratory for test and analysis, the laboratory is not required to be accredited by LELAP. However, the laboratory must document and submit for approval, quality assurance/quality control procedures that are commensurate with requirements in LAC 33:I.Subpart 3. Laboratory Accreditation.

II.E.9.c.(3) For approval of equivalent testing or analytical methods, the Permittee may petition for a regulatory amendment under LAC 33:V.105.I and LAC 33:I Chapter 9. In cases where an approved methodology for a parameter/analyte is not available or listed, a request to utilize an alternate method shall be submitted to the Administrative Authority for approval. Documentation must be submitted to the LDEQ that will verify that the results obtained from the alternate method are equal to or better than those obtained from EPA-accepted methods, as well as those deemed equivalent by the LDEQ.

II.E.10. Retention of Records

The Permittee shall maintain records from all ground water monitoring wells and associated groundwater surface elevations for the active life of the facility and for the post-closure care period.

The Permittee shall maintain records through the active life of the facility (including operation, closure and post-closure periods) as required by LAC 33:V.309.J and LAC 33:V.1529.A, B, and C. All records, including plans, must be furnished upon request and made available at all reasonable times as required by LAC 33:V.1529.C.

File copies shall be kept for LDEQ inspection for a period of not less than three years as required by LAC 33:V.317.B.

The Permittee shall, for the life of the permit, maintain records of all data used to complete the application for this permit and any supplemental information submitted under the Louisiana Hazardous Waste Control Law (LA. R.S. 30:2171 et seq.).

II.E.11. Notices of Planned Physical Facility Changes

The Permittee shall give notice to the Administrative Authority, as soon as possible, of any planned physical alterations or additions to the permitted facility, in accordance with LAC 33:V.309.L.1.

II.E.12. Physical Facility after Modification

For a closed unit being modified, the Permittee may not manage hazardous waste in the modified portion of the closed unit until:

II.E.12.a. the Permittee has submitted to and received approval from the Administrative Authority, by certified mail or hand delivery, a letter signed by the Permittee and an independent registered professional engineer stating that the unit is complete and has been constructed or modified in compliance with the permit; and

II.E.12.b. the Administrative Authority has inspected the modified unit following a request to make final inspection by the Permittee and finds it is in compliance with the conditions of the permit and all applicable sections of LAC 33:V.Subpart 1, and has issued an Order to Proceed. The Permittee may then commence treatment, storage, or disposal of hazardous waste.

II.E.13. Anticipated Noncompliance

The Permittee shall give advance notice to the Administrative Authority of any planned changes in the permitted facility or activity that may result in noncompliance with permit requirements.

II.E.14. Transfer of Permits

This permit may be transferred to a new owner or operator only if it is modified or revoked and reissued pursuant to LAC 33:V.309.L.4, 321.B, 321.C.4, and 1531.

II.E.15. Compliance Schedules

Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this permit shall be submitted no later than fourteen (14) days following each schedule date.

II.E.16. Noncompliance Reporting

The Permittee shall report orally within twenty-four (24) hours any noncompliance with the permit that may endanger human health or the environment, except where more immediate notification is required by LAC 33:I.3901, et seq. ("Notification Regulation and Procedures for Unauthorized Discharges" dated November 19, 1985, as amended.) This report shall include the following:

II.E.16.a. information concerning the release of any hazardous waste that may endanger public drinking water supplies; and

II.E.16.b. information concerning the release or discharge of any hazardous waste, or of a fire or explosion at the facility, that could threaten the environment or human health outside the facility. The description of the occurrence and its cause shall include:

II.E.16.b.(1) name, address, and telephone number of the owner or operator;

II.E.16.b.(2) name, address, and telephone number of the facility;

II.E.16.b.(3) date, time, and type of incident;

II.E.16.b.(4) name and quantity of materials involved;

II.E.16.b.(5) the extent of injuries, if any;

II.E.16.b.(6) an assessment of actual or potential hazard to the environment and human health outside the facility, where this is applicable; and

II.E.16.b.(7) estimated quantity and disposition of recovered material that resulted from the incident.

II.E.17. Follow-up Written Report of Noncompliance

The Permittee shall provide a written submission within five (5) days after the time the Permittee becomes aware of any noncompliance which may endanger human health or the environment. However, where more immediate submission is required by LAC 33:1.3901, "Notification Regulations and Procedures for Unauthorized Discharges" dated November 19, 1985, as amended, the report shall be submitted in accordance with those regulations. The written submission shall contain a description of the noncompliance and its cause; the periods of noncompliance (including exact dates and times); whether the noncompliance has been corrected; and if not, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance. If the Administrative Authority waives the requirement, then the Permittee submits a written report within fifteen (15) days after the time the Permittee becomes aware of the circumstances, as required by LAC 33:V.309.L.7.

II.E.18. Other Noncompliance

The Permittee shall report all other instances of noncompliance not otherwise required to be reported above, at the time required monitoring reports are submitted. The reports shall contain the information listed in Condition II.E.16. above.

II.E.19. Other Information

Whenever the Permittee becomes aware that it failed to submit any relevant facts in the permit application, or that it submitted incorrect information in a permit application, or in any report to the Administrative Authority, the Permittee shall promptly submit such facts or information.

II.E.20. Signatory Requirement

All applications, reports or other information submitted to the Administrative Authority shall be signed and certified according to LAC 33:V.507, 509, 511, and 513.

II.E.21. Schedule of Compliance

The Permittee shall submit for review and approval by the Administrative Authority, the following items:

- II.E.21.a.** Within ninety (90) days of the effective date of this permit, a site-specific workplan for a background investigation for sodium, magnesium, and calcium.
- II.E.21.b.** The facility will initiate a Corrective Action Strategy (CAS) pursuant to Condition VIII Appendix I, Table 1 regarding the chloride and barium contamination. As the facility has already completed much work on this issue, the LDEQ has determined that the facility has met all requirements of Table I prior to the Conceptual Model Study (CMS). Therefore, the facility will be required to submit one CMS report forty-five (45) days after the effective date of this permit. A CAS Workplan must be submitted ninety (90) days after the effective date of the permit."
- II.E.21.c.** Within sixty (60) days of the approval of the final background investigation report referred to in Condition II.E.21.a., a Sampling Analysis Plan must be submitted. The Sampling Analysis Plan will include a Statistical Analysis Plan and a Groundwater Monitoring Summary Table that reflects Condition VI.D., Table I, to detail methods and approaches for the evaluation of monitoring parameters to be followed for the Site-Specific Background Investigation.

II.E.22. Additional Operating Standards

(RESERVED)

II.E.23. Updated Documents To Be Submitted Prior To Operation

(RESERVED)

II.E.24. Documents To Be Maintained at Facility Site

- II.E.24.a.** Until post-closure is completed and certified by an independent registered professional engineer, the Permittee shall maintain at the facility the following documents and any amendments, revisions, and modifications to these documents. Any revision or changes shall be submitted with the annual report unless previously submitted.

- II.E.24.a.(1)** Waste Analysis Plan submitted in accordance with LAC 33:V.1519 (see Attachment 1).

- II.E.24.a.(2) Personnel Training Plan and the training records as required by LAC 33:V.1515 (see Attachment 1).
- II.E.24.a.(3) Contingency Plan submitted in accordance with LAC 33:V.1513 (see Attachment 1).
- II.E.24.a.(4) Arrangements with local authorities in accordance with LAC 33:V.1511.G. (see Attachment 1).
- II.E.24.a.(5) Post-Closure Plan submitted in accordance with LAC 33:V.3523 and any post-closure care requirements that may be required initially or through permit modifications in accordance with LAC 33:V.3523. (see Attachment 1).
- II.E.24.a.(6) Cost estimate for facility post-closure care submitted in accordance with LAC 33:V.3709 and any post-closure cost estimate that may be required initially or through permit modifications in accordance with LAC 33:V.3709 (see Attachment 1).
- II.E.24.a.(7) Operating records plan as required by LAC 33:V.1529.
- II.E.24.a.(8) Inspection Plan developed in accordance with LAC 33:V.517.G and 1509.B. (see Attachment 1)

II.E.24.b. All proposed amendments, revisions and modifications to any plan or cost estimates required by this permit shall be submitted to the Administrative Authority for approval.

II.E.25. Annual Report

An annual report shall be submitted covering all hazardous waste units and their activities during the previous calendar year as required by LAC 33:V.1529.D.

II.E.26. Manifest

The Permittee shall report manifest discrepancies and unmanifested waste as required by LAC 33:V.309.L.8 and 9.

II.E.27. Emissions

Emissions from any hazardous waste facility shall not violate the Louisiana Air Quality Regulations. If air quality standards are exceeded, the site will follow air regulation protocol.

II.E.28. Waste Discharges

Waste discharges from any hazardous waste facility shall not violate the Louisiana Water Quality Regulations. If water standards are exceeded, the site will follow water quality regulation protocol.

II.E.29. Non-Listed Hazardous Waste Facilities

This permit is issued for those hazardous waste facilities listed in Condition IV (Permitted Closed Facilities). If the Permittee determines that an unpermitted hazardous waste facility exists, the Permittee must immediately notify the Administrative Authority in accordance with Condition II.E.19 of the General Permit Conditions.

II.E.30. Compliance With Land Disposal Restrictions

The Permittee shall comply with those land disposal restrictions set forth in LA. R.S. 30:2193, all regulations promulgated thereunder, and the HSWA portion of this permit (Conditions VII and VIII).

II.E.31. Establishing Permit Conditions

Permits for facilities with pre-existing groundwater contamination are subject to all limits, conditions, remediation and corrective action programs designated under LAC 33:V.311.D and LAC 33:V.3303.

II.E.32. Obligation for Corrective Action

Owners or operators of hazardous waste management units must have all necessary permits during the active life of the unit and for any period necessary to comply with the corrective action requirements in Condition VIII of this permit. The facility is obligated to complete facility-wide corrective action regardless of the operational status of the facility.

II.E.33. Attachments and Documents Incorporated by Reference

All attachments and documents required by this permit, including all plans and schedules, are incorporated, upon approval by the Administrative Authority, into this permit by reference and become an enforceable part of this permit. Since required items are essential elements of this permit, failure to submit any of the required items or submission of inadequate or insufficient information may subject the Permittee to enforcement action, which may include fines, suspension, or revocation of the permit.

Any noncompliance with approved plans and schedules shall be termed noncompliance with this permit. Written requests for extension of due dates for submittals may be granted by the Administrative Authority.

If the Administrative Authority determines that actions beyond those provided for, or changes to what is stated herein, are warranted, the Administrative Authority may modify this permit according to procedures in LAC 33:V.321.

III. GENERAL POST-CLOSURE CONDITIONS

III.A. DESIGN AND OPERATION OF THE POST-CLOSURE UNIT

- III.A.1.** The Permittee must maintain all facilities to minimize the possibility of a fire, explosion, or any unauthorized sudden or nonsudden release of hazardous waste or hazardous waste constituents to air, soil, or water that could threaten human health or the environment.
- III.A.2.** The Permittee must not manage any new wastes in the Post-Closure units listed in Condition IV of this permit.

III.B. REQUIRED NOTICE

(RESERVED)

III.C. GENERAL WASTE ANALYSIS

The Permittee shall follow the procedures described in the Waste Analysis Plan (Attachment 1) and in accordance with LAC 33:V.1519.

- III.C.1.** The Permittee shall review the Waste Analysis Plan annually and report to the Administrative Authority, in the annual report, whether any revision is required to stay abreast of changes in EPA methods and/or State regulatory provisions.
- III.C.2.** If there is reason to believe that the hazardous waste has changed or the operation generating the hazardous waste has changed, the Permittee shall review and recharacterize all hazardous waste streams generated by the Permittee onsite and treated, stored or disposed onsite. The Permittee must recharacterize wastes in accordance with LAC 33:V.1519.A.3. This recharacterization shall include laboratory analyses which provide information needed to properly treat, store and dispose of the hazardous waste, including physical characteristics and chemical components of the waste. The results of this recharacterization shall be summarized in the Permittee's Annual Report.
- III.C.3.** The Permittee shall submit documentation or certification if the Permittee contracts with an outside laboratory for any service

required by the Waste Analysis Plan or LAC 33:V.Chapter 15. This documentation or certification shall be resubmitted when a different laboratory is contracted. The Permittee shall also submit documentation that the laboratory complies with the accreditation requirements of LAC 33:I.Chapter 45.

- III.C.4.** In accordance with LAC 33:V.1519.B, the Waste Analysis Plan must meet all the sampling and QA/QC procedures of Condition II.E.9. All test procedures used by the Permittee shall be maintained on file by the Permittee and made available to the Administrative Authority upon request.

III.D. SECURITY

The Permittee must comply with the security provisions of LAC 33:V.1507.

III.E. GENERAL INSPECTION REQUIREMENTS

The Permittee must follow the Inspection Plan referenced in Condition II.E.24.a.(8) and Attachment 1. The Permittee must remedy any deterioration or malfunction discovered by an inspection as required by LAC 33:V.1509.C. Records of inspections must be kept as required by LAC 33:V.1509.D. The inspection schedule must include the regulatory requirements of LAC 33:V.517.G, 1509.A and B, and 3523.B.

III.F. PERSONNEL TRAINING

The Permittee must conduct personnel training as required by LAC 33:V.1515.A, B, and C. The training shall follow the outline referenced in Attachment 1. The Permittee must maintain all training documents and records as required by LAC 33:V. 1515.D and E.

III.G. GENERAL REQUIREMENTS FOR IGNITABLE, REACTIVE, OR INCOMPATIBLE WASTE

The Permittee must take precautions as required by LAC 33:V.1517 to prevent accidental ignition or reaction of ignitable or reactive wastes.

III.H. LOCATION STANDARDS

III.H.1. The Permittee has furnished evidence that it is in compliance with seismic standards as required by LAC 33:V.517.T.

III.H.2. The Permittee must not manage any hazardous waste on any portion of the property that lies within the 100 year flood plain (as identified in the Flood Insurance Rating Map) unless such areas are raised above this flood level or other means (e.g., levees) are provided to protect such areas from washouts, overtopping by wave action, soil erosion or other effects of such a flood as required by LAC

33:V.1503.B.3. Such site improvements must be certified by independent licensed professional engineers and approved by LDEQ prior to any hazardous waste and/or hazardous waste units being placed thereon.

III.I. PRECIPITATION RUN-ON AND RUN-OFF

The Permittee must provide for the control by diversion or treatment of run-on and run-off resulting from a rainfall of at least twelve (12) inches, occurring during a period of twenty-four (24) hours in conformity with locally available records of a twenty-four (24) hour rainfall as per LAC 33:V.1503.B.2. The Permittee shall comply with the requirements of LAC 33:V.2911.

III.J. HURRICANE EVENTS

The Permittee must initiate those applicable portions of the Contingency Plan during a hurricane as well as appropriate actions required by LAC 33:V.1507, 1509 and 1511.

III.K. PREPAREDNESS AND PREVENTION

III.K.1. Required Equipment

At a minimum, the Permittee must install and maintain the equipment set forth in the Contingency Plan, as required by LAC 33:V.1511.C.

III.K.2. Testing and Maintenance of Equipment

The Permittee must test and maintain the equipment specified in Condition III.K.1 to insure its proper operation in time of emergency. The testing and maintenance of the equipment must be documented in the operating record.

III.K.3. Access to Communications or Alarm Systems

The Permittee must maintain access to the communications or alarm system as required by LAC 33:V.1511.E.1 and 1511.E.2.

III.K.4. Arrangements with Local Authorities

The Permittee shall document in the annual report that the requirements of LAC 33:V.1511.G have been met. This documentation shall include those state and local agencies involved and those facilities and operations covered. Documentation of written arrangements with state and local agencies shall also be included in this report. Where state or local authorities decline to enter into such arrangements, the Permittee must document the refusal in the operating record.

III.L. CONTINGENCY PLAN**III.L.1. Implementation of Plan**

The Permittee must immediately carry out the provisions of the Contingency Plan, and follow the emergency procedures described by LAC 33:V.1513.F whenever there is a fire, explosion, or release of hazardous waste or hazardous waste constituents that threaten or could threaten human health or the environment.

III.L.2. Copies of Plan

The Permittee must comply with the requirements of LAC 33:V.1513.C.

III.L.3. Amendments to Plan

The Permittee must review and immediately amend, if necessary, the Contingency Plan as required by LAC 33:V.1513.D.

III.L.4. Emergency Coordinator

The Permittee must comply with the requirements of LAC 33:V.1513.E, and 322.B.6 concerning the emergency coordinator.

III.M. MANIFEST SYSTEM

The Permittee shall comply with the manifest requirements of LAC 33:V.Chapter 9 and 11.

III.N. RECORD KEEPING AND REPORTING**III.N.1. Operating Record**

The Permittee shall maintain a written operating record at the facility in accordance with LAC 33:V.1529.A, B, and C.

III.N.2. Annual Report

The Permittee must comply with the annual report requirements of LAC 33:V.1529.D.

III.N.3. Operations Manual

The Permittee shall compile and keep current an operations manual covering all aspects of the Permittee's treatment, storage and disposal facilities.

III.O. POST-CLOSURE

III.O.1. Post-Closure Care

The Permittee must manage the North Surge Pond, South Surge Pond, Sulfide Pond, Sludge Ponds 1, 2, 3, and 4, in accordance with this permit, LAC 33:V. Chapter 35, Subchapter B and 2911.

III.O.2. Amendment to Post-Closure Permit

The Permittee must request modification to this post-closure permit when necessary, in accordance with LAC 33:V.3523.D. and LAC 33:V.321.

III.O.3. Post-Closure Maintenance

After final closure, the Permittee must comply with all post-closure requirements contained in LAC 33:V.3519 through 3527, including maintenance and monitoring throughout the post-closure care period specified in the permit under LAC 33:V.3521.A.1. The Permittee must maintain all units in post-closure according to the requirements in Condition V.B.

III.O.4. Post-Closure Restrictions

The Administrative Authority may require, at partial and final closure, continuation of any of the security requirements of LAC 33:V.1507, during part or all of the post-closure care period when access by the public or domestic livestock may pose a hazard to human health.

III.O.5. Post-Closure Property or Site Use

III.O.5.a. Post-closure use of property on or in which hazardous wastes remain after partial or final closure must never be allowed to disturb the integrity of the final cover, liner(s), or any other components of the containment system, or the function of the permitted closed unit's monitoring systems, unless the Administrative Authority finds that the disturbance:

III.O.5.a.i. is necessary to the proposed use of the property, and will not increase the potential hazard to human health or the environment; or

III.O.5.a.ii. is necessary to reduce a threat to human health or the environment.

III.O.5.b. Any post-closure activity other than that specified in this permit must have prior approval of the Administrative Authority.

III.O.6. Post-Closure Contact

The Permittee must provide the name, address, and phone number of the person or office to contact about the permitted post-closure units during the post-closure care period.

III.O.7. Certification of Completion of Post-Closure Care

No later than sixty (60) days after completion of the established post-closure care period for the specified unit, the Permittee must submit to the Administrative Authority, by registered mail, a certification that the post-closure care period for the hazardous waste disposal unit(s) was performed in accordance with the specifications in the approved post-closure plan. The certification must be signed by the Permittee and an independent registered professional engineer. Within 60 days after receipt of the certification the Administrative Authority will notify the owner or operator that he is no longer required to maintain financial assurance for post-closure care of that unit, unless the Administrative Authority has reason to believe that post-closure care was not conducted in accordance with the approved post-closure plan.

The certification of post-closure care shall include the certification statement found in the LAC 33:V.513.A or the current certification statement in the Louisiana hazardous waste regulations at the time of completion of post-closure care.

III.P. COST ESTIMATE FOR CARE OF THE POST-CLOSURE UNIT

- III.P.1.** The Permittee must maintain a cost estimate for the permitted and associated structures as required by LAC 33:V.3709.
- III.P.2.** The Permittee must maintain and adjust the post-closure cost estimate for inflation, as specified in LAC 33:V.3709.B, C, D, and for other circumstances that increase the cost of post-closure.
- III.P.3.** The Permittee must base all post-closure cost estimates on the assumption that a third party contractor performs post-closure monitoring and maintenance in accordance with LAC 33:V.3709.A.
- III.P.4.** The Permittee must consider the inventory and process conditions and their impact on the post-closure cost estimate for any resubmittal.
- III.P.5.** During the life of the facility, the Permittee must keep, at the facility, its latest post-closure cost estimates, as necessary, to comply with LAC 33:V.3709.D.

III.P.6. Throughout the active life of the facility, the Permittee must adjust and revise its post-closure cost estimates, as necessary, to comply with the provisions of LAC 33:V.3709.

III.Q. FINANCIAL ASSURANCE FOR THE POST-CLOSURE UNIT

Throughout the post-closure care period, the Permittee must provide updates for its financial assurance mechanisms, as necessary, to comply with the provisions of LAC 33:V.3711.

III.R. LIABILITY REQUIREMENTS

(RESERVED)

III.S. INCAPACITY OF THE PERMITTEE

The Permittee must comply with LAC 33:V.3717 whenever bankruptcy is initiated for the Permittee or its institutions providing financial assurance. If insurance is used for compliance with LAC 33:V.3715, the Permittee must immediately notify the Administrative Authority if the insurance company is placed in receivership. The Permittee must establish other financial assurance or liability coverage within sixty (60) days after such an event.

III.T. POST-CLOSURE NOTICES

If the Permittee or any subsequent Permittee of the land upon which this hazardous waste disposal unit is located wishes to remove hazardous wastes and hazardous waste residues, the liner or contaminated soils, he must request a modification to the post-closure permit in accordance with the applicable requirements in LAC 33:V, Chapters 3 and 7. The Permittee must demonstrate that the removal of hazardous wastes will satisfy the criteria of LAC 33:V.3521. By removing hazardous waste, the Permittee may become a generator of hazardous waste and must manage it in accordance with all applicable requirements of LAC 33:V, Subpart 1. If he is granted a permit modification or otherwise granted approval to conduct such removal activities, the Permittee may request that the Administrative Authority approve either:

III.T.1. the removal of the notation on the deed to the facility property or other instrument normally examined during title search; or

III.T.2. the addition of a notation to the deed or instrument indicating the removal of the hazardous waste.

IV. PERMITTED CLOSED UNITS

This permit is applicable only to the units known as the North Surge Pond, South Surge Pond, Sulfide Pond, Sludge Ponds 1, 2, 3, and 4, located on the property of Pioneer Americas LLC, Iberville Parish, Louisiana. This permit also applies to any appurtenances associated with these units. The appurtenances are defined as any run-on/run-off control systems, leachate collection/leak detection systems, tanks, and/or piping and instrumentation associated with these regulated units. If any additional appurtenances are added in the future, they would be addressed through a permit modification as required by regulation and this permit.

**TABLE 1
INVENTORY AT CLOSURE**

UNIT NAME	UNIT TYPE	Size
North Surge Pond	Surface Impoundment	160' x 100'
South Surge Pond	Surface Impoundment	160' x 90'
Sulfide Pond	Surface Impoundment	200' x 70'
Pond 1	Surface Impoundment	300' x 150'
Pond 2	Surface Impoundment	610' x 130'
Pond 3	Surface Impoundment	260' x 130'
Pond 4	Surface Impoundment	230' x 170'

V. PERMIT CONDITIONS APPLICABLE TO PERMITTED CLOSED UNITS

V.A. POST-CLOSURE CARE PERIOD

The post-closure care period will be in effect for the period of thirty (30) years, unless extended or shortened by the Administrative Authority, as specified in LAC 33:V.3521.A., Length of Post-Closure.

V.A.1 Closed Ponds 1-2: On July 1, 1981, the post-closure care period began. The LDEQ verified that the unit was closed in accordance with the approved Closure Plan and all applicable regulations.

V.A.2 Closed Pond 3: On April 5, 1983, the post-closure care period began. The LDEQ verified that the unit was closed in accordance with the approved Closure Plan and all applicable regulations.

V.A.3 Closed Pond 4: On October 15, 1986, the post-closure care period began. The LDEQ verified that the unit was closed in accordance with the approved Closure Plan and all applicable regulations.

- V.A.4.** Sulfide Pond: On May 8, 1984, the post-closure care period began. The LDEQ verified that the unit was closed in accordance with the approved Closure Plan and all applicable regulations.
- V.A.5.** North and South Surge Ponds: On April 21, 1989, the post-closure care period began. The LDEQ verified that the unit was closed in accordance with the approved Closure Plan and all applicable regulations.

V.B. POST-CLOSURE MAINTENANCE

After final closure, the owner or operator must comply with all post-closure requirements contained in LAC 33:V.3519 through 3527, Condition III.O of this permit and the approved post closure plan. This also includes maintenance and monitoring throughout the post-closure care period specified in the permit under Condition V.A and LAC 33:V.3521.A.1.

For all permit units in Post-Closure, the owner or operator must:

- V.B.1.** maintain the integrity and effectiveness of the final cover, including making repairs as necessary to correct the effects of settling, subsidence, erosion, or other events;
- V.B.2.** maintain and monitor the groundwater monitoring system and comply with all other applicable requirements of LAC 33:V, Chapter 33;
- V.B.3.** manage a run-on and run-off control system to prevent erosion at and other damage to the final cover;
- V.B.4.** maintain the final cover designed and constructed to:
 - V.B.4.a.** provide long-term minimization of migration of liquids through the surface impoundments;
 - V.B.4.b.** function with minimal maintenance at all permitted units;
 - V.B.4.c.** promote drainage and minimize erosion or abrasion of the final cover at all permitted units;
 - V.B.4.d.** accommodate settling and subsidence, as necessary, so that the cover's integrity is maintained for all permitted units; and
 - V.B.4.e.** have a permeability less than or equal to the permeability of any bottom liner system or natural subsoils present at the surface impoundments.

V.B.5. The annual report shall include a Post-Closure activity report for the North Surge Pond, South Surge Pond, Sulfide Pond, and Ponds 1-4.

V.C. POST-CLOSURE RESTRICTIONS

The administrative authority may require, at partial and final closure, continuation of any of the security requirements of LAC 33:V.1507, during part of all of the post-closure period when access by the public or domestic livestock may pose a hazard to human health.

V.D. POST-CLOSURE PROPERTY OF SITE USE

1. Post-closure use of property on or in which hazardous wastes remain after partial or final closure must never be allowed to disturb the final cover, liner(s), or any other components of the containment system, or the function of the permitted closed unit's monitoring systems, unless the administrative authority find that the disturbance:
 - a. is necessary to the proposed use of the property and will not increase the potential hazard to human health or the environment; or
 - b. is necessary to reduce a threat to human health of the environment.
2. Any post-closure activity other than that specified in this permit must have prior approval of the Administrative Authority.

VI. GROUNDWATER PROTECTION

VI.A. APPLICABILITY

The regulations of LAC 33:V, Chapters 3, 5, 15, 29, 33, 35, and 37, and Louisiana Hazardous Waste Control Law Revised Statute R.S., 30:2171 of the Environmental Quality Act, R.S., 30:2001 et seq., and the provisions of Condition VI shall apply to groundwater protection programs at the units identified in Condition IV, Table 1 of this permit. Accordingly, the units referenced in Condition IV, Table 1 of the permit are subject to post-closure groundwater monitoring.

All requirements of Condition VI must be satisfied and shall apply until the Administrative Authority has accepted the certification of completion of post-closure care required by regulation and under Condition III.O.7 of this permit. This includes the compliance, closure, and post-closure care periods.

If groundwater contamination is confirmed as a result of operations related to past or present hazardous waste management facilities associated with this site, the Permittee shall establish, expand or continue, assessment and corrective action in accordance with the requirements of LAC 33:V.Chapter 33 and as subsequently directed by the Administrative Authority.

VI.B. REQUIRED PROGRAMS

The Permittee must continue to conduct a **Compliance Monitoring Program per Condition VI.I** using all existing systems necessary to comply with the monitoring specified herein and as stated in the most current approved Sampling and Analysis Plan. The Permittee must notify the Administrative Authority in accordance with the schedule specified in Conditions VI.I and VI.L, when any of the hazardous constituents or indicator parameters are detected in concentrations equal to or exceeding the designated limits at the point of compliance or upon first detection in any other monitoring well at the facility.

The Permittee must institute corrective action in all areas where groundwater has been affected by hazardous constituents or indicator parameters exceeding the assigned concentration limits. In the event statistically significant evidence that the concentration limits defined in Condition VI.D and Table 3 of this permit have been exceeded in any groundwater monitoring wells in Table 2 of this permit, the Permittee shall modify the permit in accordance with LAC 33:V.321 and Condition VI.J of this permit in order to establish a Corrective Action Program. Corrective action must continue uninterrupted to the fullest extent until groundwater problems are abated per the requirements of LAC 33:V.3321 and this requirement is terminated through permit modification in accordance with LAC 33:V.321 and 322, as applicable.

VI.C. GROUNDWATER PROTECTION STANDARD

The groundwater protection standard shall be required during the Compliance Monitoring Program and/or Correction Action Program and is the concentration limit that shall indicate when corrective action must begin and when it may be terminated. The Administrative Authority shall establish the groundwater protection standard when hazardous constituents from a regulated unit have been detected (as defined by LAC 33.V.3303.A.1) in the groundwater.

Accordingly, the Permittee must comply with the conditions specified in this permit that are designed to ensure that hazardous constituents (Condition VI.D) detected (as defined by LAC 33.V.3303.A.1) do not exceed the concentration limits (Condition VI.D) in the uppermost permeable zones underlying the regulated units, beyond or below the point of compliance (Condition VI.E) during the compliance period (Condition VI.F).

The groundwater protection standard does not exempt the Permittee from required corrective action regarding contamination detected at wells not designated as point of compliance.

VI.D. HAZARDOUS CONSTITUENTS, PARAMETERS, ANALYTICAL FREQUENCY AND CONCENTRATION LIMITS

The wells, hazardous constituents and concentration limits to which the groundwater protection standard of LAC 33.V.3305 apply are shown herein in Tables 2 and 3. The sampling frequency for the hazardous constituents is noted in Table 2. The concentration limits for each hazardous waste constituent specified in Table 3 shall serve as the practical quantitation limit (PQL).

Table 2
Groundwater Monitoring System
Pioneer Americas LLC
St. Gabriel, LA
Groundwater Monitoring System for Regulated Units

Well Number	Unit	Well Type	Zone	Sampling Frequency	Analysis
15	Ponds 1-4	Point of Compliance	20	Semi-Annual & Annual	See Note 1 & Table 4
19	Ponds 1-4	Point of Compliance	20	Semi-Annual & Annual	See Note 1 & Table 4
22	Ponds 1-4	Point of Compliance	20	Semi-Annual & Annual	See Note 1 & Table 4
24	Ponds 1-4	Up-gradient Monitor	20	Semi-Annual & Annual	See Note 1 & Note 2
26	Ponds 1-4	Point of Compliance	20	Semi-Annual & Annual	See Note 1 & Table 4
27	Ponds 1-4	Point of Compliance	20	Semi-Annual & Annual	See Note 1 & Table 4
28	North-South Surge and Sulfide Ponds	Point of Compliance	20	Semi-Annual & Annual	See Note 1 & Table 4
29	North-South Surge and Sulfide Ponds	Point of Compliance	20	Semi-Annual & Annual	See Note 1 & Table 4
30	North-South Surge and Sulfide Ponds	Point of Compliance	20	Semi-Annual & Annual	See Note 1 & Table 4
35	North-South Surge and Sulfide Ponds	Down-gradient Monitor	20	Semi-Annual	See Note 1
41	Ponds 1-4	Up-gradient Monitor	20	Semi-Annual & Annual	See Note 1 & Note 2
56	North-South Surge and Sulfide Ponds	Down-gradient Monitor	20	Semi-Annual	See Note 1
57	North-South Surge and Sulfide Ponds	Down-gradient Monitor	20	Semi-Annual	See Note 1
58	North-South Surge and Sulfide Ponds	Down-gradient Monitor	20	Semi-Annual	See Note 1
59	North-South Surge and Sulfide Ponds	Down-gradient Monitor	20	Semi-Annual	See Note 1
32	North-South Surge and Sulfide Ponds	Down-gradient Monitor	40	Semi-Annual	See Note 1
34	North-South Surge and Sulfide Ponds	Down-gradient Monitor	40	Semi-Annual	See Note 1
37	Ponds 1-4	Down-gradient Monitor	40	Semi-Annual	See Note 1
40	All Ponds	Up-gradient Monitor	40	Semi-Annual & Annual	See Note 1 & Note 2
50	North-South Surge and Sulfide Ponds	Down-gradient Monitor	40	Semi-Annual	See Note 1
53	Ponds 1-4	Down-gradient Monitor	40	Semi-Annual	See Note 1
54	Ponds 1-4	Down-gradient Monitor	40	Semi-Annual	See Note 1
64	Ponds 1-4	Down-gradient Monitor	40	Semi-Annual	See Note 1
6	North-South Surge and Sulfide Ponds	Piezometer	20	Semi-Annual	Water Levels Only
16	Ponds 1-4	Piezometer	20	Semi-Annual	Water Levels Only
18	Ponds 1-4	Piezometer	20	Semi-Annual	Water Levels Only
21	Ponds 1-4	Piezometer	20	Semi-Annual	Water Levels Only
17b	Ponds 1-4	Piezometer	20	Semi-Annual	Water Levels Only
5	North-South Surge and Sulfide Ponds	Piezometer	40	Semi-Annual	Water Levels Only

Notes:

1. pH, specific conductance, total mercury, dissolved mercury, total barium, dissolved barium, sulfates, and chlorides
2. cyanide, phenol, sodium, magnesium, and calcium
3. pH, chlorides, and total mercury
4. Notes 2 and Table 4 are analyzed annually.
5. Wells for the 55 foot zone will be sampled only if contamination is confirmed in the 40 foot zone.
6. Table 2B is the groundwater monitoring system for the cell house and is provided for informational purposes only in Condition VI. A permit modification will not be required for any changes made to Groundwater Monitoring associated with the Cell House. All activities of AOC will be addressed via corrective action (Condition VIII) through an Administrative Order between Pioneer Americas LLC and LDEQ.

Table 2A
Groundwater Monitoring System
Pioneer Americas LLC
St. Gabriel, LA

Groundwater Monitoring System for Cell House AOC (Regulated under condition VIII)

Well Number	Unit	Well Type	Zone	Sampling Frequency	Analysis
43	Cell House	Up-gradient Monitor	20	Quarterly	See Note 1
44	Cell House	Down-gradient Monitor	20	Quarterly	See Note 1
47	Cell House	Down-gradient Monitor	20	Quarterly	See Note 1
48	Cell House	Down-gradient Monitor	20	Quarterly	See Note 1
42	Cell House	Up-gradient Monitor	40	Quarterly	See Note 1
45	Cell House	Down-gradient Monitor	40	Quarterly	See Note 1
46	Cell House	Down-gradient Monitor	40	Quarterly	See Note 1
60	Cell House	Up-gradient Monitor	Water Table	Quarterly	See Note 1
61	Cell House	Down-gradient Monitor	Water Table	Quarterly	See Note 1
62	Cell House	Down-gradient Monitor	Water Table	Quarterly	See Note 1
63	Cell House	Down-gradient Monitor	Water Table	Quarterly	See Note 1
East	Cell House	Recovery Standpipes	Water Table	Monthly	See Notes 3
Center	Cell House	Recovery Standpipes	Water Table	Monthly	See Notes 3
West	Cell House	Recovery Standpipes	Water Table	Monthly	See Notes 3

Notes:

1. pH, specific conductance, total mercury, dissolved mercury, total barium, dissolved barium, sulfates, and chlorides
2. cyanide, phenol, sodium, magnesium, and calcium
3. pH, chlorides, and total mercury
4. Notes 2 and Table 4 are analyzed annually.
5. Wells for the 55 foot zone will be sampled only if contamination is confirmed in the 40 foot zone.
6. Table 2B is the groundwater monitoring system for the cell house and is provided for informational purposes only in Condition VI. A permit modification will not be required for any changes made to Groundwater Monitoring associated with the Cell House. All activities of AOC will be addressed via corrective action (Condition VIII) through an Administrative Order between Pioneer Americas LLC and LDEQ.

Table 3
Groundwater Monitoring Parameters
Pioneer Americas, LLC
St. Gabriel, LA

Parameter	Container Type	Preservation Method	Analysis Method	PQL (ppb)	Holding Time
pH					
Specific Conductance					
Total Barium	500 ml plastic	HNO ₃ to pH < 2	6010	20	6 months
Dissolved Barium	500 ml plastic	HNO ₃ to pH < 2	6010	20	6 months
Total Mercury	500 ml plastic	HNO ₃ to pH < 2	7470	2	28 days
Dissolved Mercury	500 ml plastic	HNO ₃ to pH < 2	7470	2	20 days
Chlorides	1 liter plastic	Cool to 4° C	325.3	5,000	28 days
Total Cyanide	1 liter plastic	NaOH/ASC to > 12 Cool to 4° C	9010	40	14 days
Phenol	1 amber glass	Cool to 4° C	8270	10	7 days
Sodium	500 ml plastic	HNO ₃ to pH < 2	6010	500	6 months
Magnesium	500 ml plastic	HNO ₃ to pH < 2	6010	100	6 months
Calcium	500 ml plastic	HNO ₃ to pH < 2	6010	200	6 months
Sulfates	250 ml plastic	Cool to 4° C	375.4	5,000	6 months

Note: POC wells are analyzed for LAC 33.V.3325 Table 4 annually. See LAC 33.V.3325 for methods and PQLs.

VI.E. POINT OF COMPLIANCE

The point of compliance (POC) at which the groundwater protection standard of Condition VI.C applies, and at which monitoring must be conducted, are the vertical intervals intercepted by the wells identified in Table 2. The horizontal limit of compliance must be the surface following an imaginary line connecting the risers of monitoring wells. The vertical limit of compliance must be the uppermost aquifer.

When contamination is detected at or beyond the point of compliance for the regulated unit, additional monitoring must be conducted per Condition VI.I.6. This shall include the next vertical aquifer or permeable zone below the uppermost monitored zone. Until such time as hazardous constituents are no longer detected at the point of compliance and beyond, the groundwater quality at each monitoring well (e.g., point of compliance wells, plume defining wells and recovery wells) identified in Table 2 must be monitored. Additional monitoring wells will be installed, as required.

In the event that hazardous constituents or indicator parameters are detected at or beyond the point of compliance above the groundwater protection standard, the Permittee shall institute a Corrective Action Program per Condition VI.J. During the Corrective Action Program, the groundwater quality must be monitored in order to determine the effectiveness of the corrective action.

VI.F. COMPLIANCE PERIOD

A compliance period is required when a Compliance Monitoring Program (Condition VI.I) and/or Corrective Action Program (Condition VI.J) is established. During the compliance period, the Permittee must determine whether the regulated units are in compliance with the groundwater protection standard at the point of compliance. The compliance period during which the groundwater protection standard of LAC 33:V.3305.A applies is until the Administrative Authority has accepted the certification of completion of post-closure care required by regulation and under Condition III.O.7 of this permit.

If a Corrective Action Program has been implemented, the compliance period cannot end until after the Permittee has demonstrated that the corrective action has been effectively implemented and the groundwater protection standard has not been exceeded for a period of three (3) consecutive years.

VI.G. GENERAL REQUIREMENTS

VI.G.1. The Permittee's groundwater monitoring system for the previously identified hazardous waste management units in Table 1 must consist of all wells as listed in Table 2, unless changed in the future by the Administrative Authority through permit modification.

VI.G.2. The Permittee must maintain the structural and mechanical integrity and provide protection from accidental damage and surface infiltration for all wells (including piezometers) described in Table 2. The Permittee must implement a well inspection schedule and submit a written report to the Administrative Authority on any damage in accordance with Condition II.E.17 of this permit. A well cannot be abandoned unless exempted from the program at a later date by the Administrative Authority, or unless the integrity of the well is threatened. In such a case, the well must be replaced in conformance with a workplan approved by the Administrative Authority (see Condition VI.K – Construction and Abandonment of Monitoring Wells and Geotechnical Boreholes).

VI.G.3. Upgradient wells must always yield groundwater samples from the uppermost water bearing zone that are representative of groundwater that has not been affected by possible leakage from the regulated units. Downgradient and vertical point of compliance wells must yield groundwater samples from the water bearing zones that represent the quality of groundwater beneath the units that flows to the points of compliance.

VI.G.4. Each well must be measured for total depth and depth to water on the same day and prior to purging. Measurements must be to the nearest 0.1 foot. If 10% of the screened interval is blocked by sediments, the well must be redeveloped prior to the next required sampling event.

VI.G.5. Each well must be purged by evacuation to dryness or by removing a minimum of three casing volumes. The wells must be sampled immediately upon purging and/or when sufficient water for sampling has recharged the well. Other evacuation techniques (e.g., micro-purging) must be approved by the Administrative Authority prior to use. Purging methods must be consistent throughout the monitoring period.

VI.G.6. Samples must be withdrawn using dedicated or adequately cleaned equipment for each well. No equipment or method may be used that will chemically alter or influence the sample. Sampling devices other than bailers must be approved by the Administrative Authority prior to use. Care must be taken to avoid placing clean sampling equipment on the ground or on any contaminated surface. Sampling methods and equipment must be compatible throughout the monitoring period.

VI.G.7. Groundwater samples shall be monitored and analyzed for turbidity. Samples containing less than five (5) NTU (nephelometric turbidity unit) are acceptable for analysis when the analytical method is sensitive to turbidity (such as the analysis of metals). Samples containing greater than five (5) NTU are only acceptable when well development is certified by a qualified geologist as "the best obtainable". An evaluation of turbidity must accompany all potentially affected analytical values.

VI.G.8. Standard indicators (e.g., specific conductance, pH, etc.) listed in table 2 must be measured and will be used to indicate well integrity and possible groundwater contamination.

VI.G.9. A chain of custody protocol must be employed that will allow for tracking possession and handling of samples from the time of collection through laboratory analysis. All sample containers must be labeled to prevent misidentification, have proper seals, and indicate the required analytical tests.

VI.G.10. Sample preservation, handling and analysis must meet of the specifications of LAC 33:V.3315.D and 3315.E and Test Methods for Evaluating Solid Waste Physical/Chemical Methods 3rd Edition (EPA Publication Number SW-846, as amended) or an equivalent substitute (approved by the Administrative Authority prior to implementation). Containers, preservation methods and analytical limits are listed in Table 3 of this permit.

VI.G.11. The Permittee must use one of the statistical procedures outlined in the most current approved facility Sampling and Analysis Plan or LAC 33:V.3315.H in determining whether concentrations have been exceeded for the hazardous constituents specified in Table 3.

VI.G.12. Records of all sampling and analytical work must be maintained at the site during the life of the units, including the post-closure care period. An up-to-date field log book (or compilation of field sheets) must be kept at the site which documents, as a minimum, the following for each sample:

- well identification number;
- total well depth;
- elevation of top of casing;
- water elevations;
- calculations of the standing water volume in the well;
- water color (visual) and odor;
- field measurements and methods (pH, specific conductance, etc.);
- well evacuation procedures and equipment;
- total volume of water evacuated;
- sample withdrawal procedures and equipment;
- name of collector, sample date and time;
- sample identification numbers; and
- other field observations.

VI.G.13. Reporting and notification requirements shall be in accordance with Condition VI.L.

VI.H. DETECTION MONITORING PROGRAM

(RESERVED – The Permittee is currently in the Compliance Monitoring Program as per Condition VI.I.)

VI.I. COMPLIANCE MONITORING PROGRAM

The Permittee must conduct a Compliance Monitoring Program in accordance with LAC 33:V.3319 and as subsequently directed by the Administrative Authority. A Compliance Monitoring Program is required whenever hazardous constituents have been detected at the point of compliance for a regulated unit. The Permittee must continue or expand the Compliance Monitoring Program until one of the following occurs: 1) compliance with the groundwater protection standard is achieved for at least three (3) years (at that time, the Permittee must notify the Administrative Authority in writing, and upon approval submit a permit modification application to reestablish a Detection Monitoring Program); or 2) a Corrective Action Program is established with adequate monitoring as delineated in Condition VI.J and LAC 33:V.3321.D, and the permit is modified accordingly.

VI.I.1. Semi-Annual Monitoring for Determining Compliance with the Groundwater Protection Standard

The Permittee must utilize the groundwater monitoring system outlined in Conditions VI.B through VI.G and as required by LAC 33:V.3315 to monitor the groundwater to determine whether regulated units are in compliance with the groundwater protection standard. Accordingly, the Permittee shall determine the concentration of each hazardous constituent and indicator parameter listed in Table 3 of this permit at least semi-annually from groundwater in the wells listed in Table 2 of this permit.

VI.I.2. The Permittee must determine whether there is statistically significant evidence of contamination above the groundwater protection standard for any hazardous constituent or indicator parameter specified in Condition VI.D. Statistical methods shall conform to Condition VI.G.11 and shall be completed within sixty (60) days of the groundwater monitoring event.

VI.I.3. If the Permittee determines, pursuant to Condition VI.I.2, that there is statistically significant evidence of contamination above the groundwater protection standard for any hazardous constituent and or indicator parameter, the Permittee must do the following:

VI.I.3.a. notify the Administrative Authority in writing within seven (7) days of this finding. The notification must indicate the constituent(s) which have been exceeded and their respective concentration limit(s); and

VI.I.3.b. submit an application for a permit modification to establish a Corrective Action Program meeting the requirements of LAC 33:V.3321 within 180 days (or ninety (90) days if the Permittee has previously submitted a certified engineering feasibility study under LAC 33:V.3317.G.5.b). The application must include the following information:

VI.I.3.b.(1). a detailed description and schedule for additional monitoring and corrective action that will achieve compliance with the groundwater protection standard specified in Conditions VI.C and VI.D of this permit; and

VI.I.3.b.(2). a geotechnical plan (certified by a qualified geologist or a geotechnical engineer) to demonstrate the effectiveness of the planned corrective action. This plan may incorporate the Compliance Monitoring Program developed to meet the requirements of this permit, except that the Permittee will be required to also monitor as frequently as necessary to demonstrate the effectiveness of the corrective action.

VI.I.4. If the Permittee determines, pursuant to Condition VI.I.2, that there is statistically significant evidence of contamination above the groundwater protection standard for any hazardous constituent or indicator parameter, the Permittee may demonstrate that a source other than a regulated unit caused the contamination, or that the detection is an artifact caused by an error in sampling, analysis, or statistical evaluation, or natural variation in the groundwater. The Permittee may make a demonstration under this Condition in addition to, or in lieu of, submitting a permit modification application; however, the Permittee is not relieved of the requirement to submit a permit modification application within the time specified in Condition VI.I.3.b unless the demonstration made under this Condition successfully shows that a source other than a regulated unit caused the increase, or that the increase resulted from error in sampling, analysis, or evaluation. In making a demonstration under this Condition, the Permittee must:

VI.I.4.a. Notify the Administrative Authority in writing within seven (7) days that the Permittee intends to make a demonstration under this Condition;

VI.I.4.b. Within ninety (90) days, submit a report to the Administrative Authority which demonstrates that a source other than a regulated unit caused the standard to be exceeded or that the apparent noncompliance with the standard resulted from an error in sampling, analysis or evaluation;

VI.I.4.c. Within ninety (90) days, submit to the Administrative Authority an application for a permit modification to make any appropriate changes to the Compliance Monitoring Program; and

VI.I.4.d. Continue to monitor in accordance with the Compliance Monitoring Program established under this permit.

VI.I.5. Annual Monitoring for LAC 33:V.3325, Table 4 Constituents

The Permittee must utilize the groundwater monitoring system outlined in Conditions VI.B through VI.G and as required by LAC 33:V.3315 to monitor the groundwater to determine whether hazardous constituents listed in LAC 33:V.3325, Table 4 are present in the uppermost aquifer (and, if so, at what concentration). Accordingly, the Permittee shall determine the concentration of each hazardous constituent listed in LAC 33:V.3325, Table 4 annually from all point of compliance wells listed in Table 2 of this permit.

VI.I.5.a. The Permittee must determine whether there is statistically significant evidence of additional hazardous constituents not previously identified. Statistical methods shall conform to Condition VI.G.11 and shall be completed within sixty (60) days of the groundwater monitoring event.

Should results indicate that additional hazardous constituents are present, the Permittee may either resample for any of the constituents pursuant to Condition VI.I.5.b or report these additional constituents to the Administrative Authority and add them to the monitoring list and modify the permit pursuant to Condition VI.I.5.c.

VI.I.5.b. If the Permittee finds LAC 33:V.3325, Table 4 constituents in the groundwater that are not already identified in the permit as monitoring constituents, the Permittee may indicate in the report to the Administrative Authority (Condition VI.I.5.a) that the Permittee intends to re-sample and repeat LAC 33:V.3325, Table 4 analysis. This re-sampling must be performed within one month of the report submittal (Condition VI.I.5.a). The Permittee must report the concentrations of these additional constituents to the Administrative Authority within sixty (60) days of the groundwater monitoring event. Should results indicate that additional hazardous constituents are present, the Permittee must add them to the monitoring list and modify the permit pursuant to Condition VI.I.5.c.

VI.I.5.c. The Permittee must submit a permit modification application to add the additional constituents to Table 2 and Table 3 of this permit in accordance with LAC 33:V.321 and Condition II.C of this permit.

VI.I.6. Additional Monitoring Requirements

As part of the Compliance Monitoring Program, the plume must be defined and monitored by additional monitoring wells (a.k.a., assessment, plume defining, downgradient monitor wells, etc.) to satisfy LAC 33:V.3315.A.3.

VI.I.6.a. The additional monitoring wells listed in Table 2 must be sampled according to a frequency approved by the Administrative Authority (semi-annually), as part of the on-going evaluation of the plume, for constituents specified in Table 3.

VI.I.6.b. If the Permittee determines that there is statistically significant evidence of contamination for hazardous constituents or indicator parameters at any downgradient well previously reported as non-detect, the Permittee must notify the Administrative Authority of the finding in writing within seven (7) days. This notification must indicate what hazardous constituents or indicator parameters have shown statistically significant evidence of contamination. Further, the Permittee must do one of the following:

VI.I.6.b.(1) Submit a workplan to the Administrative Authority within ninety (90) days from the date of the confirmation of contamination. The workplan must detail the specific additional assessment procedures the Permittee will conduct to identify the full extent of the plume. The workplan shall include any proposed changes to the groundwater monitoring system, monitoring frequency, sampling and analysis procedures and methods, and/or statistical methods; or

VI.I.6.b.(2) Demonstrate that a source other than a regulated unit caused the contamination or that the detection is an artifact caused by an error in sampling, analysis, or statistical evaluation or natural variation in the groundwater. The Permittee may make a demonstration under this Paragraph in addition to, or in lieu of, submitting an assessment workplan; however, the Permittee is not relieved of the requirement to submit an assessment workplan within the time specified unless the demonstration made under this Paragraph successfully shows that a source other than a regulated unit caused the increase, or that the increase resulted from error in sampling, analysis, or evaluation. In making a demonstration under this Paragraph the Permittee must:

VI.I.6.b.(2).a. Specify the Permittee's intention to make a demonstration under this Paragraph when notifying the Administrative Authority of the statistically significant evidence of contamination;

VI.I.6.b.(2).b. Within ninety (90) days, submit a report to the Administrative Authority that demonstrates that a source other than a regulated unit caused the contamination or that the contamination resulted from error in sampling, analysis, or evaluation. Further, the Permittee must submit an application for a permit modification to make any appropriate changes to the monitoring program; and

VI.I.6.b.(2).c. Continue to monitor in accordance with the monitoring program established under this permit.

VI.I.7. Changes to the Compliance Monitoring Program

If the Permittee determines that the Compliance Monitoring Program no longer satisfies the requirements of this permit, the Permittee must within ninety (90) days submit an application for a permit modification to make any appropriate changes to the program.

Any time the Administrative Authority determines that the Compliance Monitoring Program does not satisfy the requirements of this permit, the Permittee shall, within ninety (90) days of notification of such determination, submit an application for a permit modification to make any appropriate changes to the program.

VI.J. CORRECTIVE ACTION PROGRAM

(RESERVED - The Permittee currently is in the Compliance Monitoring Program as per Condition VI.I. The requirements of VI.J [in *italics*] are included for informational purposes only and are meant to provide a course of action in the event a Corrective Action Program is required. In the event a Corrective Action Program is required, the permit will be modified in accordance with LAC 33:V.321 and Condition VI.I of this permit and the requirements of VI.J will become enforceable.)

A Corrective Action Program is required whenever the groundwater protection standard has been exceeded at or beyond the point of compliance for a regulated unit. The Permittee must continue or expand the Corrective Action Program in accordance with the requirements of LAC 33:V.3321 and as subsequently directed by the Administrative Authority to the fullest extent until groundwater problems are abated. The Corrective Action Program shall be initiated and completed by the Permittee within a period of time specified by the Administrative Authority and until such time as this requirement is terminated through permit modification.

VI.J.1. Corrective Action Objectives

The Corrective Action Program must:

VI.J.1.a. protect human health and the environment;

VI.J.1.b. attain compliance with the groundwater protection standard as specified in Condition VI.C;

VI.J.1.c. control the source(s) of releases so as to reduce or eliminate, to the maximum extent practicable, further releases of hazardous constituents or indicator parameters into the environment that may pose a threat to human health or the environment;

VI.J.1.d. meet applicable statutory and regulatory requirements; and

VI.J.1.e. meet acceptable waste management requirements.

VI.J.2. Implementation and Monitoring of the Corrective Action Program

The Permittee must implement the Corrective Action Program according to the approved Corrective Action Plan and schedule contained therein.

VI.J.2.a. The Permittee must conduct groundwater monitoring as described in the approved corrective action plan. The groundwater monitoring program:

VI.J.2.a.(1). may be based upon the requirements of the Compliance Monitoring Program (Condition VI.I);

VI.J.2.a.(2). must be as effective as the Compliance Monitoring Program in determining compliance with the groundwater protection standard; and

VI.J.2.a.(3). must indicate the effectiveness of the corrective action and have ongoing assessment monitoring.

VI.J.2.b. The Permittee must evaluate and report the effectiveness and progress of the corrective action semi-annually to the Administrative Authority as required by LAC 33:V.3321.G and in accordance with Condition VI.L.1.o. The evaluation shall include the following:

VI.J.2.b.(1). general discussion on the effectiveness of the corrective action in achieving the corrective action goals, and progress being made toward completion;

VI.J.2.b.(2). trend analysis and updated schedule for completion of the corrective action;

VI.J.2.b.(3). evaluation of performance reliability, ease of implementation and any encountered concerns or problems;

VI.J.2.b.(4). any changes to surrounding land use or environmental receptors that may impact effectiveness;

VI.J.2.b.(5). recommendations for improvement;

VI.J.2.b.(6). recovered amounts for each component of a recovery system (e.g., recovery wells, French drain systems, etc.) and the entire system; recovered amounts for both contaminants and all liquids; recovered amounts for both the reporting period and since recovery implementation; and

VI.J.2.b.(7). graphical and statistical analyses, as necessary, to demonstrate the effectiveness and progress (the Administrative Authority may also require predictive computer modeling, as per LAC 33:V.3303.D).

VI.J.3. Revisions to the Corrective Action Program

If the Permittee determines that the Corrective Action Program (including monitoring) no longer satisfies the requirements of this permit, the Permittee, within ninety (90) days, shall submit an application for a permit modification to make any appropriate changes to the program.

Any time the Administrative Authority determines that the Corrective Action Program does not satisfy the requirements of this permit, the Permittee shall, within ninety (90) days of notification of such determination, submit an application for a permit modification to make any appropriate changes to the program.

VI.J.4. Completion of Corrective Action Program

If the Permittee is conducting corrective action at the end of the compliance period, the Permittee must continue for as long as necessary to achieve compliance with the groundwater protection standard. The Corrective Action Program may be terminated when the groundwater protection standard is being met at the point of compliance and throughout the entire zone affected by the release for at least three (3) consecutive years.

VI.J.4.a. The Permittee must demonstrate to the satisfaction of the Administrative Authority that the groundwater protection standard is being met.

VI.J.4.b. Upon successful demonstration from the Permittee that the corrective action should be terminated, the Permittee must submit to the Administrative Authority an application for permit modification pursuant to LAC 33:V.321. The application will include provisions to establish either a Detection Monitoring Program or Compliance Monitoring Program on a schedule approved by the Administrative Authority.

VI.J.4.c. Upon modification of the permit, the Permittee shall be released from the requirements for financial assurance for corrective action under LAC 33:V.3301.B.

VI.K. CONSTRUCTION AND ABANDONMENT OF MONITORING WELLS AND GEOTECHNICAL BOREHOLES

The construction and abandonment of groundwater monitoring wells must conform to the standards and guidelines specified in "CONSTRUCTION OF GEOTECHNICAL BOREHOLES AND GROUNDWATER MONITORING SYSTEMS HANDBOOK", dated May 1993 ("Construction Handbook", May 1993). This document is printed by and available from the Louisiana Department of Transportation and Development (DOTD), Water Resources Section, P.O. Box 94245, Baton Rouge, Louisiana 70804-9245.

VI.K.1.a. A workplan for the construction of a new well must be submitted to the Administrative Authority for approval as the entire groundwater monitoring system must be approved. Any required new well should be installed within thirty (30) days of approval of the workplan by the Administrative Authority. Upon completion of new or replacement well, a copy of DOTD-GW-1 S, DOTD Well Registration Short Form, is to be provided to the Administrative Authority.

VI.K.1.b. The Permittee must provide for the sealing of any vertical migration path resulting from exploratory boring, leachate collection or detection systems and/or groundwater monitoring programs as provided in LAC 33:V.3323. A workplan for the plugging and abandonment of a well must be submitted for approval by the Administrative Authority, whenever such migration pathways are discovered. Upon completion of well abandonment, a copy of DOTD-GW-2, DOTD Well Plugging and Abandonment Form, is to be provide to the Administrative Authority.

VI.L. REPORTING AND NOTIFICATION REQUIRMENTS

VI.L.1. Semi-Annual Groundwater Report

A semi-annual groundwater report for each six-month period of January through June must be submitted to the Administrative Authority no later than September 1st of the same calendar year. The report shall include the following:

VI.L.1.a. a general discussion on sampling, analytical, statistical and QA/QC procedures;

VI.L.1.b. a table showing well number, well depth, interval screened, zone monitored, well diameter, screen and casing material (and the type of pump, if applicable) for all wells;

VI.L.1.c. a facility map showing all wells (up-gradient, point of compliance, assessment, plume defining and recovery) and identifying zones in which wells are screened;

VI.L.1.d. a scaled potentiometric surface map showing well locations, groundwater elevations with respect to mean sea level for each monitored zone;

VI.L.1.e. documentation of the chain of custody of all sampling and analyses;

VI.L.1.f. all analytical data, including QA/QC;

VI.L.1.g. a tabular summary of all analytical data;

VI.L.1.h. a statistical method shall be used in evaluating data for each required indicator parameter (e.g., pH, specific conductance, total organic carbon, total organic halogen) and hazardous constituent, as approved by the Administrative Authority;

VI.L.1.i. tables and graphical representation of the values of the required indicator parameters and the hazardous constituents including:

VI.L.1.i.(1). contaminant concentration isopleth maps;

VI.L.1.i.(2). contaminant concentration versus time graphs;

VI.L.1.j. a statement of whether a statistically significant difference in concentration is detected;

VI.L.1.k. a discussion of any significant changes in the data from the last reporting period;

VI.L.1.l. a discussion of inspections and maintenance of the groundwater monitoring system, physical condition of the wells, including down time for any well or part of the system and actions taken to return the system to normal operations and maximum efficiency;

VI.L.1.m. a discussion of water-quality properties (i.e., color, odor, etc.);

VI.L.1.n. disposition of purge water and other potentially contaminated materials; and

VI.L.1.o. evaluation of the effectiveness and progress of any corrective action according to Condition VI.J.2.b.

VI.L.2. Annual Groundwater Report

An annual groundwater report must be submitted to the Administrative Authority no later than March 1st of the following calendar year as required by LAC 33:V.1529.D.8.

VI.L.2.a. The report must contain the reporting requirements of Condition VI.L.1 for the six-month period of July through December.

VI.L.2.b. In addition, the report must summarize and interpret all groundwater activities for the preceding calendar year including an evaluation of the monitoring strategy in relation to the direction of groundwater flow and locations of wells associated with the units. Applicable calculations must also include groundwater flow rates, contaminant migration rates (as applicable), statistical comparisons, trend analyses, and any other pertinent information regarding the adequacy of the monitoring system.

VI.L.3. Notification of Statistically Significant Evidence of Contamination

The Permittee must notify the Administrative Authority in accordance with Conditions VI.H, VI.I or VI.J when there is statistically significant evidence of contamination for hazardous constituents or indicator parameters.

VI.L.4. Notification of Release to SPOC

In the event of a release in, into, within, or on any groundwaters of the state, (i.e., any confirmation of contamination in any previously uncontaminated saturated subsurface strata) the Permittee must notify the Department within twenty-four (24) hours of confirming statistically significant evidence of a release. Notification shall be made to the Office of Environmental Compliance, Emergency and Radiological Services Division, Single Point of Contact (SPOC) in accordance with LAC 33:309.L.7 and Condition II.E.16 of this permit. This requirement is in addition to notification requirements to the Administrative Authority discussed in Conditions VI.H, VI.I or VI.J.

HAZARDOUS AND SOLID WASTE AMENDMENTS

VII. GENERAL CONDITIONS PURSUANT TO THE HAZARDOUS AND SOLID WASTE AMENDMENTS

VII.A. STANDARD CONDITIONS

VII.A.1. Waste Minimization

Annually, by March 1, for the previous year ending December 31, the Permittee shall enter into the operating record as required by LAC 33:V.1529.B.19, a statement certified according to LAC 33:V.513.A specifying that the Permittee has a program in place to reduce the volume and toxicity of hazardous wastes generated by the facility's operation to the degree determined by the Permittee to be economically practicable; and that the proposed method of treatment, storage, or practicable disposal method that is currently available to the Permittee minimizes the present and future threat to human health and the environment. A current description of the program shall be maintained in the operating record and a copy of the annual certified statement shall be submitted to the Administrative Authority. The following criteria should be considered for the program:

VII.A.1.a. Any written policy or statement that outlines goals, objectives, and/or methods for source reduction and recycling of hazardous waste at the facility;

VII.A.1.b. Any employee training or incentive programs designed to identify and implement source reduction and recycling opportunities;

VII.A.1.c. An itemized list of the dollar amounts of capital expenditures (plant and equipment) and operating costs devoted to source reduction and recycling of hazardous waste;

VII.A.1.d. Factors that have prevented implementation of source reduction and/or recycling;

VII.A.1.e. Sources of information on source reduction and/or recycling received at the facility (e.g., local government, trade associations, suppliers, etc.);

VII.A.1.f. An investigation of additional waste minimization efforts that could be implemented at the facility. This investigation would analyze the potential for reducing the quantity and toxicity of each waste stream through production reformulation, recycling, and all other appropriate means. The analysis would include an assessment of the technical feasibility, cost, and potential waste reduction for each option;

VII.A.1.g. A flow chart or matrix detailing all hazardous wastes the facility produces by quantity, type, and building/area;

VII.A.1.h. A demonstration of the need to use those processes that produce a particular hazardous waste due to a lack of alternative processes or available technology that would produce less hazardous waste;

VII.A.1.i. A description of the waste minimization methodology employed for each related process at the facility. The description should show whether source reduction or recycling is being employed;

VII.A.1.j. A description of the changes in volume and toxicity of waste actually achieved during the year in comparison to previous years; and

VII.A.1.k. The Permittee may meet the requirements for waste minimization by developing an Environmental Management System according to the EPA document, Integrated Environmental Management System Implementation Guide, EPA 744-R-00-011, October 2000, found on the EPA website at www.epa.gov/opptintr/dfe/pubs/iems/iems_guide/index.htm.

VII.A.2. Dust Suppression

Pursuant to LAC 33:V.4139.B.4, and the Toxic Substances Control Act, the Permittee shall not use waste or used oil or any other material which is contaminated with dioxin, polychlorinated biphenyls (PCBs), or any other hazardous waste (other than a waste identified solely on the basis of ignitability), for dust suppression or road treatment.

VII.A.3. Failure to Disclose

The Permittee's failure in the application or during the permit issuance process to disclose fully all relevant facts at any time may be cause for termination or modification of this Permit in accordance with LAC 33:323.B.2 and 3.

VII.A.4. Suspension, Modification, or Revocation and Reissuance, and Termination of Permit

This Permit may be modified, revoked and reissued, or terminated for cause as specified in LAC 33:V.323. The filing of a request by the Permittee for a permit modification, revocation and reissuance, termination, or the notification of planned changes or anticipated noncompliance on the part of the Permittee, does not stay the applicability or enforceability of any permit condition.

VII.A.4.a. If the Administrative Authority tentatively decides to modify or revoke and reissue a permit under LAC 33:V.321.C. or 323, a draft permit shall be prepared incorporating the proposed changes. The Administrative Authority may request additional information and, in the case of a modified permit, may require the submission of an updated permit application.

VII.A.4.b. The Permittee may initiate permit modification proceedings under LAC 33:V.321.C. All applicable requirements and procedures as specified in LAC 33:V.321.C shall be followed.

VII.A.4.c. Modifications of this Permit do not constitute a reissuance of the Permit.

VII.A.5. Permit Review

This Permit may be reviewed by the Administrative Authority five years after the date of permit issuance and may be modified as necessary as provided for in LAC 33:V.321.C. Nothing in this section shall preclude the Administrative Authority from reviewing and modifying the Permit at any time during its term.

VII.A.6. Compliance with Permit

Compliance with a RCRA permit during its term constitutes compliance, for purposes of enforcement, with subtitle C of RCRA except for those requirements not included in the permit which:

VII.A.6.a. Become effective by statute;

VII.A.6.b. Are promulgated under LAC 33:V.Chapter 22 restricting the placement of hazardous wastes in or on the land; or

VII.A.6.c. Are promulgated under LAC 33:V.Chapters 23, 25 and 29 regarding leak detection systems for new and replacement surface impoundment, waste pile, and landfill units, and lateral expansions of surface impoundment, waste pile, and landfill units. The leak detection system requirements include double liners, construction quality assurance (CQA) programs, monitoring action leakage rates, and response action plans, and will be implemented through the procedures of LAC 33:V.321.C Class 1 permit modifications.

VII.A.7. Specific Waste Ban

VII.A.7.a. The Permittee shall not place in any land disposal unit the wastes specified in LAC 33:V. Chapter 22 after the effective date of the prohibition unless the Administrative Authority has established disposal or treatment standards for the hazardous waste and the Permittee meets such standards and other applicable conditions of this Permit.

VII.A.7.b. The Permittee may store wastes restricted under LAC 33:V.Chapter 22 solely for the purpose of accumulating quantities necessary to facilitate proper recovery, treatment, or disposal provided that it meets the requirements of LAC 33:V.2205 including, but not limited to, clearly marking each tank or container.

VII.A.7.c. The Permittee is required to comply with all applicable requirements of LAC 33:V.2245 as amended. Changes to the Waste Analysis Plan will be considered permit modifications at the request of the Permittee, pursuant to LAC 33:V.321.C.

VII.A.7.d. The Permittee shall review the waste analysis plan and analyze the waste when a process changes to determine whether the waste meets applicable treatment standards. Results shall be maintained in the operating record pursuant to Condition III.C.1 and 2.

VII.A.8. Information Submittal for the Corrective Action Strategy

Failure to comply with any condition of the Permit, including information submittals, constitutes a violation of the Permit and is grounds for enforcement action, permit amendment, termination, revocation, suspension, or denial of permit renewal application. Falsification of any submitted information is grounds for termination of this Permit (LAC 33:V.323.B.3).

The Permittee shall ensure that all plans, reports, notifications, and other submissions to the Administrative Authority required by this Permit using the Corrective Action Strategy are signed and certified in accordance with LAC 33:V.Chapter 5, Subchapter B. All submittals required under the corrective action strategy must conform to those requirements outlined in the RECAP (see Condition VIII of this permit). Variance from content and/or formatting guidelines provided under the RECAP shall be requested by the Permittee prior to submittal to the Administrative Authority, as deemed necessary. Approval or disapproval of such a request with further guidance on content and formatting will be provided by the Administrative Authority, as deemed necessary. Five (5) copies each of these plans, reports, notifications or other submissions and one (1) electronic copy (3.5" IBM compatible disk or CD-ROM) of all portions thereof which are in word processing format shall be submitted to the Administrative Authority by Certified Mail or hand delivered to:

**Louisiana Department of Environmental Quality
Office of Environmental Assessment
Environmental Technology Division
P.O. Box 4314
Baton Rouge, LA 70821-4314**

A summary of the planned reporting milestones pursuant to the corrective action requirements of this Permit is found in Condition VIII, Table 1.

VII.A.9. Data Retention

All raw data, such as laboratory reports, drilling logs, bench-scale or pilot-scale data, and other supporting information gathered or generated during activities undertaken

pursuant to this Permit shall be maintained at the facility during the term of this Permit, including any reissued Permits.

VII.A.10. Management of Wastes

All solid wastes which are managed pursuant to a remedial measure taken under the corrective action process or as an interim measure addressing a release or the threat of a release from a solid waste management unit shall be managed in a manner protective of human health and the environment and in compliance with all applicable Federal, State and local requirements. As a response to the Louisiana legislature mandate La. R.S. 30:2272 (Act 1092 of the 1995 Regular Session) to develop minimum remediation standards, the LDEQ promulgated the Risk Evaluation Corrective Action Program (RECAP). RECAP's tiered approach to risk evaluation and corrective action establishes not only across the board numerical standards for most media, but also allows for the development of more site-specific numerical standards, as warranted. The Permittee is required to comply with all applicable requirements of RECAP. Approval of units for managing wastes and conditions for operating the units shall be granted through the permitting process.

VII.B. EMISSION STANDARDS - PROCESS VENTS, EQUIPMENT LEAKS, TANKS, SURFACE IMPOUNDMENTS, AND CONTAINERS (AA-BB-CC) AIR REGULATIONS)

VII.B.1. PERFORMANCE STANDARDS FOR EQUIPMENT LEAKS (RESERVED)

VII.B.2. STANDARDS FOR TANKS, SURFACE IMPOUNDMENTS, AND CONTAINERS (RESERVED)

TABLE VII.B.1. EMISSION CONTROLS FOR TANKS (RESERVED)

TABLE VII.B.2. EMISSION CONTROLS FOR CONTAINERS/CONTAINER STORAGE AREAS (RESERVED)

VII.C. SPECIFIC CONDITION - CLOSURE

Pursuant to Section 3005(j)(1) of the Hazardous and Solid Waste Amendments of 1984, the Permittee shall close any closing units in accordance with the following provisions:

VII.C.1. Other than consolidation of any wastes from the sites in conformance with LAC 33:V.Chapter 22, Land Disposal Restrictions, the Permittee shall not place waste prohibited by LAC 33:V.Chapter 22 into any closing units;

VII.C.2. The Permittee shall perform unit closures in accordance with the Closure Plan(s) as approved at the time of closure, and which meet(s) all relevant State and Federal closure requirements at the time of closure; and

VII.C.3. The Permittee shall notify the Administrative Authority in writing at least sixty (60) days prior to commencement of closure.

VIII. SPECIAL CONDITIONS PURSUANT TO HAZARDOUS AND SOLID WASTE AMENDMENTS—CORRECTIVE ACTION STRATEGY

Corrective Action for Releases: Section 3004(u) of RCRA, as amended by the Hazardous and Solid Waste Amendments (HSWA), and LAC 33:V.3322 require that permits issued after November 8, 1984, address corrective action for releases of hazardous waste or hazardous constituents from any solid waste management unit at the facility, regardless of when the waste was placed in the unit.

EPA's traditional RCRA corrective action approach is structured around several elements common to most activities. In the first phase, RCRA facility assessment (RFA), EPA or the authorized state assesses the facility to identify releases and determine the need for corrective action. In the second phase, RCRA facility investigation (RFI), the facility conducts a more detailed investigation to determine the nature and extent of contaminants released to ground water, surface water, air, and soil. If remedial action is needed, a third phase, corrective measures study (CMS), is started. During this phase, the facility conducts a study, which when completed, describes the advantages, disadvantages, and costs of various cleanup options. After selection of a final remedy, the fourth phase, corrective measures implementation (CMI), is initiated. The facility is required to design, construct, operate, maintain, and monitor the final remedy(s).

The Corrective Action Strategy (CAS) is an alternate corrective action approach that can be implemented during any phase of corrective action for a release area. The Permittee shall use the CAS approach as the framework for corrective action to clarify, facilitate and expedite the process, and shall use the **Louisiana Department of Environmental Quality Risk Evaluation/Corrective Action Program (RECAP)** for screening and media-specific cleanup standards. EPA has interpreted the term "release" to mean, "any spilling, leaking, pumping, pouring, emitting, emptying, discharging, injecting, escaping, leaching, dumping, or disposing into the environment." (50 FR 2873, July 15, 1985). The CAS refers to "release areas" as solid waste management units (SWMUs) and areas of concern (AOCs) while the RECAP refers to release areas as areas of investigation (AOIs). SWMUs and AOCs may also be referred to as "AOIs" when investigated and managed under the RECAP.

VIII.A. ALTERNATE CORRECTIVE ACTION

VIII.A.1. Introduction to CAS

This Permit will utilize the CAS Guidance Document (www.epa.gov/Arkansas/6pd/rcra_c/pd-o/riskman.htm) developed by the U.S. Environmental Protection Agency (EPA) Region 6 whenever the Administrative Authority determines that it will serve to facilitate the corrective action. The CAS Guidance Document shall be utilized to the fullest extent practicable for planning and implementation of the corrective action. The CAS in this Permit shall not supersede

existing Federal, State, and local regulations. The two primary objectives are to prioritize corrective action at the facility, and streamline corrective action administrative procedures, resulting in the protection of human health and the environment.

The CAS is a performance-based approach; using data quality objectives, investigations begin with the endpoint in mind. The CAS is a risk management strategy that can be implemented during any phase of corrective action. However, the CAS need not be applied to work that has already been completed to the satisfaction of the Administrative Authority. Performance standards are established at the beginning of the corrective action process, allowing earlier and more focused implementation. Releases are screened using RECAP screening numbers to determine the priority of corrective action, and remedial alternatives are selected on the basis of their ability to achieve and maintain the established performance standards.

There is no one specific path through the CAS process. The CAS is a facility-wide approach, focusing corrective action on releases that pose the greatest risk first. Screening releases will also enable some areas of interest to qualify for no further action at this time (Condition VIII.A.3.a.), thus resources can be used to best benefit the protection of human health and the environment. The CAS process also considers activities previously conducted under the traditional corrective action process. Appendix 1 of this permit contains a summary of corrective action activities completed to date and also describes where the Permittee is in the CAS process at the time of issuance of this permit. The applicability of various provisions of the CAS will depend on where the Permittee is in the CAS process as detailed in Appendix 1.

The traditional RCRA corrective action process and reports (i.e., RFIs, CMSs, CMIs, etc.) are not elements of the CAS. However, the use of information and reports from the traditional corrective action process, if available, is encouraged, in addition to new site-specific information.

The Administrative Authority, through an agency-initiated permit modification, may remove the CAS as the means of facility-wide corrective action in the case of the failure of the Permittee to disclose information, abide by the terms and conditions of this permit, adhere to agreed schedules, or show adequate progress; or should an impasse occur between the Permittee and the Administrative Authority. The Administrative Authority will institute other means of corrective action (such as traditional corrective action) at the facility through modification of this permit.

VIII.A.2. Performance Standards

Expectations for the outcome of corrective action at a facility are established in the CAS by three performance standards as defined in Conditions VIII.A.2.a through c. The Permittee's proposed performance standards shall be presented during the scoping meeting. The Permittee must justify the proposed performance standards through evaluation and documentation of land use, ground water designation (current

and reasonably expected future use), types of receptors present, exposure pathways, etc.; as described in RECAP, Chapter 2. Through the application of the performance standards and RECAP, the Permittee and Administrative Authority shall determine whether a release must be addressed through corrective action, and whether implemented corrective actions are protective of human health and the environment.

The Permittee shall submit the performance standards in writing along with the Conceptual Site Model (Condition VIII.D) within one-hundred and twenty (120) days after the scoping meeting. The Administrative Authority may either approve the performance standards proposed by the Permittee or establish performance standards that the Administrative Authority deems necessary to protect human health and the environment.

The three CAS performance standards are defined below. The order in which the performance standards are listed does not indicate that one performance standard takes priority over another. All applicable performance standards must be achieved by the Permittee.

VIII.A.2.a. Source Control Performance Standard

Source control refers to the control of materials that include or contain hazardous wastes or hazardous constituents that act as a reservoir for migration of contamination to soil, sediment, ground water, surface water, or air, or as a source for direct exposure.

The facility must determine if source material is present. Removal, containment, treatment, or a combination of the three, must be evaluated on a case-by-case basis. Controlling source material is a predominating issue in the CAS, and must be addressed to ensure protectiveness over time. Prioritization of the SWMUs and AOCs does not mean avoidance of controlling source materials.

VIII.A.2.b. Statutory and Regulatory Performance Standard

Applicable statutory and regulatory requirements (Federal, State, and local) must be identified. These requirements may dictate media-specific contaminant levels (e.g., maximum contaminant levels (MCLs) in drinking water) that must be achieved and may become a performance standard for the Permittee.

VIII.A.2.c. Final Risk Goal Performance Standard

The final risk goal is the level of protection to be achieved and maintained by the Permittee. The final risk goal shall be based on site-specific issues including land use, special subpopulations, contaminant concentrations based on acceptable risk, location at which the levels are measured, and the remediation time frame, as specified by RECAP.

One final risk goal may apply to the entire facility, but it is more likely that different releases will require different final risk goals due to variations in location of releases, land use, proximity of receptors, etc. The final risk goal will be based on sound risk assessment methodologies (Condition VIII.A.3).

VIII.A.3. Use of RECAP

The latest edition of the RECAP document shall be used by the Permittee to determine the need for further corrective actions under this permit. The RECAP consists of a tiered framework comprised of a Screening Option (SO), and three Management Options (MO). The tiered management options allow site evaluation and corrective action efforts to be tailored to site conditions and risks. As the MO level increases, the approach becomes more site-specific and hence, the level of effort required to meet the objectives of the Option increases.

The RECAP shall be used by the Permittee to evaluate data quality and data usability (RECAP Section 2.4 and 2.5), to determine the identity of an AOI as described in RECAP Section 2.6, and for estimations of Area of Investigation Concentrations and Groundwater Compliance Concentrations for each media as defined in RECAP Section 2.8.

The RECAP shall be used by the Permittee to evaluate land use as described in RECAP Section 2.9, and groundwater/aquifer use as described in RECAP Section 2.10.

The RECAP shall be used by the Permittee to prioritize AOCs, SWMUs, and AOIs that require remediation so site investigations are focused on the release areas that pose the greatest risk. As the CSM is compiled, the Permittee shall assess historical data (RECAP Section 2.5) and use the following management options, as appropriate, to address each release site.

VIII.A.3.a. Screening Option

The Permittee shall use the Screening Standards (SS) which are LDEQ-derived screening numbers for soil and groundwater for non-industrial and industrial land use scenarios. The SS shall be used to demonstrate that an AOI does not pose a threat to human health and the environment and, hence does not require further action at this time (NFA-ATT) or that further evaluation is warranted under a higher Management Option.

VIII.A.3.b. Management Option 1

The Permittee shall use Management Option 1 (MO-1) which provides a RECAP standard (RS) derived for non-industrial and industrial exposure scenarios using currently recommended default exposure parameters and toxicity values. Under MO-1, an AOI may warrant a NFA-ATT determination, or if an exposure, source, or compliance concentration detected

at the AOI exceeds a MO-1 limiting RS, then the Permittee may; (1) remediate to the MO-1 limiting RS (and comply with closure/post closure requirements for MO-1), or (2) proceed with a MO-2 or MO-3 evaluation.

VIII.A.3.c. Management Option 2

The Permittee shall use Management Option 2 (MO-2) which provides for the development of soil and groundwater RS using site-specific data with specified analytical models to evaluate constituent fate and transport at the AOI. The results of this evaluation shall be used in conjunction with standard reasonable maximum exposure (RME) assumptions to identify site-specific MO-2 RS. Under MO-2, an AOI may warrant a NFA-ATT determination, or if an exposure, source, or compliance concentration detected at the AOI exceeds a MO-2 limiting RS, then the Permittee may; (1) remediate to the MO-2 limiting RS (and comply with closure/post closure requirements for MO-2), or (2) proceed with a MO-3 evaluation.

VIII.A.3.d. Management Option 3

The Permittee shall use Management Option 3 (MO-3) which provides the option of using site-specific data for the evaluation of exposure and the evaluation of environmental fate and transport at the AOI. The results of the site-specific evaluation may be to develop site-specific MO-3 RS. Under MO-3, an AOI may warrant a NFA-ATT determination, or if an exposure, source, or compliance concentration detected at the AOI exceeds a MO-3 limiting RS, then the Permittee shall; (1) remediate to the MO-3 RS, (2) conduct confirmatory sampling, and (3) comply with closure/post closure requirements for MO-3.

VIII.A.4. Corrective Action for Releases Beyond Facility Boundary

Section 3004(v) of RCRA as amended by HSWA, and State regulations promulgated as LAC 33:V.3322.C require corrective actions beyond the facility property boundary, where necessary to protect human health and the environment, unless the Permittee demonstrates that, despite the Permittee's best efforts, the Permittee was unable to obtain the necessary permission to undertake such actions. The Permittee is not relieved of all responsibility to clean up a release that has migrated beyond the facility boundary where offsite access is denied.

VIII.A.5. Financial Responsibility

Assurances of financial responsibility for corrective action shall be provided by the Permittee as specified in the Permit following major modification for remedy selection. The Administrative Authority reserves the right to require financial assurance prior to remedy selection based upon facility compliance history, the extent and degree of contamination, financial health of the Permittee, and input from the public.

VIII.A.6. Summary of Corrective Action Activities

A summary of the corrective action activities associated with the facility is provided in Condition VIII, Appendix 1 of this permit. AOCs and SWMUs that are currently being managed or proposed for management under a prescribed corrective action program (e.g., groundwater order, corrective action order, CERCLA) are identified in Condition VIII, Appendix 1, Table 1 of this permit.

VIII.A.7. Approval of Alternate Schedule

The Permittee may submit a written request for an alternate schedule for a submittal deadline as presented in Condition VIII, Table 1. The request should propose a specific alternate schedule and include an explanation as to why the alternate schedule is necessary. The Administrative Authority will consider site-specific criteria in either approving or disapproving the request for an alternate schedule.

VIII.B. PROJECT DEVELOPMENT AND SCOPING MEETING

VIII.B.1. Notice of Intent

The Permittee must submit to the Administrative Authority a Notice of Intent to conduct corrective action using the CAS within sixty (60) days of the effective date of this permit. The notice of intent should state the following in a concise manner:

VIII.B.1.a. General information regarding facility location;

VIII.B.1.b. General information regarding the facility's operational history;

VIII.B.1.c. General discussion on how the Permittee will proceed through the CAS;

VIII.B.1.d. Brief description of proposed performance standards for corrective action; and

VIII.B.1.e. Propose a date for a scoping meeting between the Permittee and the Administrative Authority to be held within sixty (60) days of the date of the Notice of Intent.

VIII.B.2. Scoping Meeting

The scoping meeting will serve as the first CAS milestone where the Permittee and the Administrative Authority identify expectations concerning CAS implementation. The length and extent of the meeting will depend on the complexity of the site. Agreements on land use, groundwater classification, the level of detail required in the conceptual site model (see Condition VIII.D) and expectations for remediation goals will be discussed during the scoping meeting(s). During the scoping meeting the Permittee will present the following information to the Administrative Authority:

VIII.B.2.a. A conceptual site model (if one already has been developed);

VIII.B.2.b. Discussions on history of corrective action at the facility, including facility investigations, risk evaluations or risk assessments, interim measure/stabilizations and final remedies implemented;

VIII.B.2.c. Proposed performance standards for the facility with justification, and potential risk management approaches;

VIII.B.2.d. Discussions on how the Permittee plans to use the CAS to meet its corrective action obligations, including permitting and compliance issues;

VIII.B.2.e. A Communication Strategy Plan that specifies where in the CAS process the Permittee is currently and how the Permittee will provide information about future progress at the facility to the Administrative Authority (i.e., progress reports, conference calls, routine meetings, etc.);

VIII.B.2.f. Site-specific concerns (i.e., sensitive environments or special subpopulations);

VIII.B.2.g. Need for interim measures or stabilization activities, if necessary; and

VIII.B.2.h. Schedule for submittal of the CAS Investigation Workplan and proposed schedule for conducting and completing CAS requirements, including public participation.

Information plans and reports that have already been developed by the Permittee during the corrective action process can be referenced during the scoping meeting. The Permittee must coordinate with the Administrative Authority in order to determine the date, time, and location of the scoping meeting.

VIII.C. REPORTING REQUIREMENTS

VIII.C.1. The Permittee shall submit, in accordance with Condition VII.A.8, signed reports of all activities conducted pursuant to the provisions of this Permit as required by the Administrative Authority. The reporting schedule shall be determined on a case-by-case basis by the Administrative Authority. These reports shall contain, as applicable to the stage of corrective action, the information required by CAS, as well as the following:

VIII.C.1.a. A description of the work completed and an estimate of the percentage of work completed;

VIII.C.1.b. Summaries of all findings, including summaries of laboratory data;

VIII.C.1.c. Summaries of all problems or potential problems encountered during the reporting period and actions taken to rectify problems;

VIII.C.1.d. Projected work for the next reporting period;

VIII.C.1.e. Summaries of contacts pertaining to corrective action or environmental matters with representatives of the local community, public interest groups or State government during the reporting period;

VIII.C.1.f. Changes in key project personnel during the reporting period; and

VIII.C.1.g. Summaries of all changes made in implementation during the reporting period.

VIII.C.2. Copies of other reports relating to or having bearing upon the corrective action work (e.g., inspection reports, drilling logs and laboratory data) shall be made available to the Administrative Authority upon request.

VIII.C.3. In addition to the written reports as required in Condition VIII.C.1 and VIII.C.2 above, at the request of the Administrative Authority, the Permittee shall provide status review through briefings with the Administrative Authority.

VIII.C.4. The determination and approval of remedy selections, schedules of submittals and minor changes to any corrective action workplans may be made by the Administrative Authority during the scoping meeting or status review briefings as described in Condition VIII.C.3.

VIII.D. SPECIFIC CONDITION – CONCEPTUAL SITE MODEL (CSM)

No later than 120 days after the scoping meeting, the Permittee shall submit to the Administrative Authority a CSM (along with the Performance Standards detailed in Condition VIII.A.2) or an update of any CSM submitted at the scoping meeting providing background information and the current conditions at the facility. The level of detail required for the CSM will be discussed during the scoping meeting. At a minimum, the CSM must address current site conditions, land use, known and/or potential constituent source(s), routes of constituent migration, exposure media (i.e., soil, surface waters, groundwater), exposure points, points of compliance and pathways, receptors and source media to be evaluated under the RECAP. The CSM must include a completed Figure 8 (LAC 33:I.Chapter 13). The Permittee may include completed investigations, existing data, or previously submitted documents in the CSM by reference. References must include the names, dates, and brief summaries of the documents.

If a CSM has been previously developed, the scoping meeting will also provide the opportunity for the Permittee and Administrative Authority to consider and identify all data gaps in the CSM. The initial CSM shall be considered the “base document” to be prepared and updated by the facility as new information is gathered during investigations. The CSM shall be used by the facility to make decisions regarding risk management options, ecological

risk, and monitored natural attenuation determinations (RECAP Section 2.16), or technical impracticability (TI) waiver determinations, when appropriate.

The Administrative Authority reserves the right to require revisions to the CSM based upon data resulting from ongoing investigations and activities. Revisions to the CSM may also be required for newly identified SWMUs or AOCs according to Condition VIII.L of this permit (See Appendix 1, Ongoing Corrective Action) and based on new information and information not previously considered by the Administrative Authority.

The CSM shall be divided into Profiles as detailed in Conditions VIII.D.1 through 6. If the Permittee chooses to use existing data and documents in the CSM, it may not be necessary to prepare the Profiles as detailed in Conditions VIII.D.1 through 6. However, the existing documents and data must provide sufficient information and detail which corresponds to the information required by the Facility, Land Use and Exposure, Physical, Release, Ecological, and Risk Management Profiles.

VIII.D.1. Facility Profile

The Permittee shall include in the CSM a Facility Profile which shall summarize the regional location, pertinent boundary features, general facility structures, process areas, and locations of solid waste management units or other potential sources of contaminant migration from the routine and systematic releases of hazardous constituents to the environment (e.g., truck or railcar loading/unloading areas). The Permittee shall also include historical features that may be potential release areas because of past management practices. The Facility Profile shall include:

VIII.D.1.a. Map(s) and other documents depicting the following information (all maps shall be consistent with the requirements set forth in LAC 33:V Chapter 5 and be of sufficient detail and accuracy to locate and report all current site conditions):

VIII.D.1.a.(1) General geographic location;

VIII.D.1.a.(2) Property lines with the owners of all adjacent property clearly indicated;

VIII.D.1.a.(3) Facility structures, process areas and maintenance areas;

VIII.D.1.a.(4) Any other potential release areas shall be delineated, such as railcar loading/unloading areas or any other AOI as described in RECAP Section 2.6; and

VIII.D.1.a.(5) Locations of historical features that may be potential release areas or any areas of past solid and hazardous waste generation, treatment, storage or disposal activities.

VIII.D.1.b. The Facility Profile shall also include a description of ownership and operation of the facility.

VIII.D.1.c. The Permittee shall provide pertinent information for those spills that have not been assessed and reported to the Administrative Authority during facility investigations, addressed by facility spill contingency plans, or previously remediated or deemed for no further action. The information must include at minimum, approximate dates or periods of past waste spills, identification of the materials spilled, the amount spilled, the location where spilled, and a description of the response actions conducted (local, state, federal, or private party response units), including any inspection reports or technical reports generated as a result of the response.

VIII.D.2. Land Use and Exposure Profile

The Permittee shall include in the CSM a Land Use and Exposure Profile which includes surrounding land uses (industrial and non-industrial, as described in RECAP Sections 2.9.1 and 2.9.2), resource use locations (water supply wells, surface water intakes, etc.), beneficial resource determinations (groundwater classifications as described in RECAP Section 2.10), natural resources (wetlands, etc.), sensitive subpopulation types and locations (schools, hospitals, nursing homes, day care centers, etc.), applicable exposure scenarios, and applicable exposure pathways identifying the specific sources, releases, migration mechanisms, exposure media, exposure routes and receptors. The Land Use and Exposure Profile shall include:

VIII.D.2.a. Map(s) and other documents depicting the following information (all maps shall be consistent with the requirements set forth in LAC 33:V Chapter 5 and be of sufficient detail and accuracy to locate and report all current site conditions):

VIII.D.2.a.(1) Surrounding land uses, resource use locations, and natural resources/wetlands;

VIII.D.2.a.(2) Locations of sensitive subpopulations; and

VIII.D.2.a.(3) An exposure pathway flowchart which outlines sources, migration pathways, exposure media and potential receptors as depicted in Figure 8 (CMS example) of the RECAP.

VIII.D.3. Physical Profile

The Permittee shall include in the CSM a Physical Profile which shall describe the factors that may affect releases, fate and transport, and receptors, including; topography, surface water features, geology, and hydrogeology. The Physical Profile shall include:

VIII.D.3.a. Map(s) and other documents depicting the following information (all maps shall be consistent with the requirements set forth in LAC 33:V.Chapter 5 and be of sufficient detail and accuracy to locate and report all current site conditions):

VIII.D.3.a.(1) Topographic maps with a contour interval of five (5) or ten (10) feet, a scale of one inch to 100 feet (1:100), including hills, gradients, and surface vegetation or pavement;

VIII.D.3.a.(2) Surface water features including routes of all drainage ditches, waterways, direction of flow, and how they migrate to other surface water bodies such as canals and lakes;

VIII.D.3.a.(3) Regional geology including faulting and recharge areas, as well as local geology depicting surface features such as soil types, outcrops, faulting, and other surface features;

VIII.D.3.a.(4) Subsurface geology including stratigraphy, continuity (locations of facies changes, if known), faulting and other characteristics;

VIII.D.3.a.(5) Maps with hydrogeologic information identifying water-bearing zones, hydrologic parameters such as transmissivity, and conductivity. Also locations and thicknesses of aquitards or impermeable strata; and

VIII.D.3.a.(6) Locations of soil borings and production and groundwater monitoring wells, including well log information, and construction of cross-sections which correlate substrata. Wells shall be clearly labeled with ground and top of casing elevations (can be applied as an attachment).

VIII.D.4. Release Profile

The Permittee shall include in the CSM a Release Profile which shall describe the known extent of contaminants in the environment, including sources, contaminants of concern (COC), areas of investigations, distribution and magnitude of known COCs with corresponding sampling locations, and results of fate and transport modeling depicting potential future extent/magnitude of COCs. The Release Profile shall include:

VIII.D.4.a. Map(s) and other documents depicting the following information (all maps shall be consistent with the requirements set forth in LAC 33:V. Chapter 5 and be of sufficient detail and accuracy to locate and report all current site conditions):

VIII.D.4.a.(1) Estimations of source concentrations, exposure concentrations and compliance concentrations for each affected media as defined in Section 2.8 of RECAP;

VIII.D.4.a.(2) Isopleth maps depicting lateral extent and concentrations of COCs;

VIII.D.4.a.(3) Results of fate and transport modeling showing potential exposure concentrations and locations; and

VIII.D.4.a.(4) Locations of potential sources including past or present waste units or disposal areas and all SWMUs/AOCs.

VIII.D.4.b. Table(s) depicting the following information for each SWMU/AOC, including but not limited to: location; type of unit/disposal/release area; design features; operating practices (past and present); period of operation; age of unit/disposal/release area; general physical condition; and method of closure.

VIII.D.4.c. Table(s) depicting the following waste/contaminant characteristics for those areas referenced in Condition VIII.D.4.b, including but not limited to: type of waste placed in the unit (hazardous classification, quantity, chemical composition), physical and chemical characteristics (physical form, description, temperature, pH, general chemical class, molecular weight, density, boiling point, viscosity, solubility in water, solubility in solvents, cohesiveness, vapor pressure); and migration and dispersal characteristics of the waste (sorption coefficients, biodegradability, photodegradation rates, hydrolysis rates, chemical transformations).

VIII.D.5. Ecological Profile

The Permittee shall include in the CSM an Ecological Profile that shall describe the physical relationship between the developed and undeveloped portions of the facility, the use and level of disturbance of the undeveloped property, and the type of ecological receptors present in relation to completed exposure pathways. When compiling data for the Ecological Profile, current, as well as, future impacts to receptors and/or their habitats shall be considered. The Ecological Profile shall include:

VIII.D.5.a. A history and description of the developed property on the facility, including structures, process areas, waste management units, and property boundaries;

VIII.D.5.b. A history and description of the undeveloped property, including habitat type (wetland, grassy area, forest, ponds, etc.). Include a description of the primary use, degree and nature of any disturbance, along with proximity to drainage ditches, waterways and landfill areas;

VIII.D.5.c. A description of the site receptors in relation to habitat type, including endangered or protected species, mammals, birds, fish, etc.;

VIII.D.5.d. A description of the relationship between release areas and habitat areas, specifically relating chemicals of potential ecological concern (COEC) to ecological receptors;

VIII.D.5.e. An ecological checklist as described in Section 7.0 of RECAP. An ecological checklist (presented in Appendix C, Form 18 of the RECAP) shall be used to determine if a tier 1 (screening level) Ecological Risk Assessment (ERA) is warranted.

VIII.D.6. Risk Management Profile

The Permittee shall include in the CSM a Risk Management Profile that shall describe how each AOI at the facility will be managed for the protection of human health and the environment. The Risk Management Profile will serve as documentation of the results of the site ranking system (described in Section 2.2 of RECAP). The Risk Management Profile will also document the criteria and verify that the SO, MO-1, MO-2 or MO-3 is appropriate for application at each AOI. The Risk Management Profile shall include:

VIII.D.6.a. A table for tracking the management options for each AOI, and the determination made, whether an AOI is deemed for no further action at this time (NFA-ATT) or is going to use either the SO, MO-1, MO-2 or MO-3 management option.

VIII.D.6.b. A list of identified site-wide data gaps for further investigation.

VIII.D.6.c. Documentation of all interim measures which have been or are being undertaken at the facility, including under State or Federal compliance orders, other than those specified in the Permit. This documentation shall include the objectives of the interim measures and how the measure is mitigating a potential threat to human health or the environment and/or is consistent with and integrated into requirements for a long term remedial solution.

VIII.E. INTERIM MEASURES

VIII.E.1. If at any time during the term of this Permit, the Administrative Authority determines that a release or potential release of hazardous constituents from a SWMU/AOC poses a threat to human health and the environment, the Administrative Authority may require interim measures. The Administrative Authority shall determine the specific measure(s) or require the Permittee to propose a measure(s). The interim measure(s) may include a permit modification, a schedule for implementation, and an Interim Measures Workplan. The Administrative Authority may modify this Permit according to LAC 33:V.321 to incorporate interim measures

into the Permit. However, depending upon the nature of the interim measures, a permit modification may not be required.

VIII.E.2. The Permittee may propose interim measures at any time by submittal of an Interim Measures Workplan subject to the approval of the Administrative Authority.

VIII.E.3. The Administrative Authority shall notify the Permittee in writing of the requirement to perform interim measures and may require the submittal of an Interim Measures Workplan. The following factors will be considered by the Administrative Authority in determining the need for interim measures and the need for permit modification:

VIII.E.3.a. Time required to develop and implement a final remedy;

VIII.E.3.b. Actual and potential exposure to human and environmental receptors;

VIII.E.3.c. Actual and potential contamination of drinking water supplies and sensitive ecosystems;

VIII.E.3.d. The potential for further degradation of the medium in the absence of interim measures;

VIII.E.3.e. Presence of hazardous wastes in containers that may pose a threat of release;

VIII.E.3.f. Presence and concentration of hazardous waste including hazardous constituents in soil that has the potential to migrate to ground water or surface water;

VIII.E.3.g. Weather conditions that may affect the current levels of contamination;

VIII.E.3.h. Risks of fire, explosion, or accident; and

VIII.E.3.i. Other situations that may pose threats to human health and the environment.

VIII.E.5. Upon approval of the Interim Measures Workplan and completion of the interim measure(s) implementation, the Permittee will submit a report to the Administrative Authority describing the completed work.

VIII.E.6. At anytime during or after the interim measure(s), including the issuance of an NFA-ATT, the Administrative Authority may require the Permittee to submit the SWMUs/AOCs for further corrective action.

VIII.F. CAS (CORRECTIVE ACTION STRATEGY) INVESTIGATION WORKPLAN

VIII.F.1. The CAS Investigation Workplan that describes site investigation activities for corrective action shall be submitted to the Administrative Authority within 180 days after the scoping meeting between the Permittee and the Administrative Authority. The CAS Investigation Workplan must address releases of hazardous waste or hazardous constituents to all media, unless otherwise indicated, for those SWMUs/AOCs listed in Appendix 1, Table 1. The focus of the site investigation phase for corrective action is to collect data to fill in data gaps identified in the CSM. The corrective action investigations may be conducted in phases if warranted by site conditions, contingent upon approval by the Administrative Authority.

VIII.F.1.a. The CAS Investigation Workplan shall describe the management options (MO) for each AOI/release area, data quality objectives for achieving each management option, and proposals for release characterizations (sampling and analysis/quality assurance plans) to support the data quality objectives (DQOs). (DQOs are determined based on the end use of the data to be collected, and the DQO development process should be integrated into project planning and refined throughout the CAS implementation. DQOs shall be used to 1) ensure that environmental data are scientifically valid, defensible, and of an appropriate level of quality given the intended use, and 2) expedite site investigations. The CAS Investigation Workplan is required to have DQOs that are developed to support the performance standard for each release.) The CAS Investigation Workplan shall detail all proposed activities and procedures to be conducted at the facility, the schedule for implementing and completing such investigations, the qualifications of personnel performing or directing the investigations, including contractor personnel, and the overall management of the site investigations. The scope of work for the site investigation can be found in RECAP Appendix B.

VIII.F.1.b. The CAS Investigation Workplan shall describe sampling, data collection quality assurance, data management procedures (including formats for documenting and tracking data and other results of investigations) and health and safety procedures.

VIII.F.1.c. Development of the CAS Investigation Workplan and reporting of data shall be consistent with the latest version of the following EPA and State guidance documents or the equivalent thereof:

VIII.F.1.c.(1) Guidance for the Data Quality Assessment, Practical Methods for Data Analysis. QA97 Version EPA QA/G-9. January 1998;

VIII.F.1.c.(2) Guidance for the Data Quality Objectives Process. EPA QA/G-4. September 1994;

VIII.F.1.c.(3) Data Quality Objectives Remedial Response Activities. EPA/540/G87-003. March 1987;

VIII.F.1.c.(4) Guidance on Quality Assurance Project Plans. EPA QA/G-5. February 1998;

VIII.F.1.c.(5) Interim EPA Data Requirements for Quality Assurance Project Plans. EPA Region 6, Office of Quality Assurance. May 1994;

VIII.F.1.c.(6) 29 CFR 1910.120 (b) for the elements to Health and Safety plans;

VIII.F.1.c.(7) RCRA Groundwater Monitoring: Draft Technical Guidance EPA/530-R-93-001 November 1992;

VIII.F.1.c.(8) Test Methods for Evaluating Solid Waste, Physical/Chemical Methods; SW-846, 3rd Edition. November 1992, with revisions;

VIII.F.1.c.(9) The LDEQ Handbook - Construction of Geotechnical Boreholes and Groundwater Monitoring Systems," prepared by the LDEQ and the Louisiana Department of Transportation and Development. This document is printed by and available from the Louisiana Department of Transportation and Development, Water Resources Section, P. O. Box 94245, Baton Rouge, Louisiana 70804-9245; and

VIII.F.1.c.(10) The LAC 33:I.Chapter 13 and Louisiana Department of Environmental Quality Risk Evaluation/Corrective Action Program (RECAP).

VIII.F.2. After the Permittee submits the CAS Investigation Workplan; the Administrative Authority will approve, disapprove, or otherwise modify the CAS Investigation Workplan in writing. All approved workplans become enforceable components of this Permit.

In event of disapproval (in whole or in part) of the workplan, the Administrative Authority shall specify deficiencies in writing. The Permittee shall modify the CAS Investigation Workplan to correct these within the time frame specified in the notification of disapproval by the Administrative Authority. The modified workplan shall be submitted in writing to the Administrative Authority for review. Should the Permittee take exception to all or part of the disapproval, the Permittee shall submit a written statement of the ground for the exception within fourteen (14) days of receipt of the disapproval.

VIII.F.3. The Administrative Authority shall review for approval, as part of the CAS Investigation Workplan or as a new workplan, any plans developed pursuant to Condition VIII.L addressing further investigations of newly-identified SWMUs/AOCs, or Condition VIII.M addressing new releases from previously-identified SWMUs/AOCs.

VIII.G. IMPLEMENTATION OF SITE INVESTIGATION ACTIVITIES UNDER CAS

No later than fourteen (14) days after the Permittee has received written approval from the Administrative Authority for the CAS Investigation Workplan, the Permittee shall implement the site investigation activities according to the schedules and in accordance with the approved CAS Investigation Workplan and the following:

VIII.G.1. The Permittee shall notify the Administrative Authority at least 10 working days prior to any field sampling, field-testing, or field monitoring activity required by this Permit to give LDEQ personnel the opportunity to observe investigation procedures and/or split samples.

VIII.G.2. Deviations from the approved CAS Investigation Workplan, which are necessary during implementation, must be approved by the Administrative Authority and fully documented and described in the progress reports (Condition VIII.C), RECAP Report (Condition VIII.H) and the final Risk Management Plan (Condition VIII.J).

VIII.H. RECAP REPORT

Within ninety (90) days after completion of the site investigation the Permittee shall submit a RECAP Report to the Administrative Authority for approval. The RECAP Report shall document the results of the site investigation activities, and the evaluation of the impacts from releases. The Administrative Authority will review and evaluate the report and provide the Permittee with written notification of the report's approval or a notice of deficiency. If the Administrative Authority determines the RECAP Report does not fully meet the objectives stated in the CAS Investigation Workplan (Permit Condition VIII.F), the Administrative Authority shall notify the Permittee in writing of the report's deficiencies, and specify a due date for submittal of a revised Final Report to the Administrative Authority.

VIII.H.1. The Permittee shall screen site-specific data using the appropriate RECAP standard (RS) for each AOI (depending on the MO), evaluate impacts from releases with exposure scenario evaluations, and update the Risk Management Profile of the CSM.

VIII.H.2. The report shall include, but not be limited to, the following:

VIII.H.2.a. Documentation of site investigation activities and results;

VIII.H.2.b. Evaluation of exposure scenarios to document impacts from releases;

VIII.H.2.c. Deviations from the CAS Investigation Workplan;

VIII.H.2.d. Results of screening activities using RECAP standards (RS), including SO, MO-1, MO-2, or MO-3 RS for each media;

VIII.H.2.e. The revised CSM with updated profiles which incorporate investigation and screening results; and

VIII.H.2.f. Proposed revisions to performance standards based on new information (e.g., change in land use, difference in expected receptors and/or exposure, or other differences in site conditions), if warranted.

VIII.I. REMEDIAL ALTERNATIVES STUDY

Upon completion and approval of the RECAP Report, the Permittee shall proceed with the evaluation of remedial alternatives to complete corrective action for each AOI according to the performance standards described in Condition VIII.A.2. The remedial alternatives shall be submitted to the Administrative Authority in the Remedial Alternatives Study (RAS) within ninety (90) days of the Administrative Authority's approval of the RECAP Report. In the Remedial Alternatives Study, the Permittee shall identify and evaluate various potential remedies that would meet the performance-based corrective action objectives and propose one or more specific remedies based on an evaluation of applicable data and available corrective action technologies. The RAS shall be prepared in a manner that addresses the extent and nature of the contamination at the facility.

VIII.I.1. The Permittee shall evaluate remedies for each AOI that shall:

VIII.I.1.a. attain compliance with corrective action objectives for releases of hazardous waste and/or hazardous constituents, as established in the Conceptual Site Model or in later investigations approved by the Administrative Authority;

VIII.I.1.b. control sources of releases;

VIII.I.1.c. meet acceptable waste management requirements;

VIII.I.1.d. protect human health and the environment; and

VIII.I.1.e. meet applicable statutory and regulatory requirements (as noted in Condition VIII.A.2.b).

VIII.I.2. The Permittee shall evaluate the use of presumptive remedies and innovative technologies to achieve the appropriate remedial performance standards for each AOI.

VIII.I.3. The Permittee shall review the current interim measures/ stabilization activities to evaluate if these measures meet all the criteria for final remedy.

VIII.I.4. If under certain site-specific conditions, or when it is not technically or economically feasible to attain the corrective action objectives, the Permittee may propose to use institutional controls to supplement treatment or containment-based remedial actions upon approval of the Administrative Authority (Section 2.15 of RECAP).

VIII.I.5. The RAS shall at a minimum include:

VIII.I.5.a. An evaluation of the performance reliability, ease of implementation, and the potential impacts of the potential remedies;

VIII.I.5.b. An assessment of the effectiveness of potential remedies in achieving adequate control of sources and meeting remedial performance standards;

VIII.I.5.d. An assessment of the costs of implementation for potential remedies;

VIII.I.5.e. An assessment of the time required to begin and complete the remedy;

VIII.I.5.f. An explanation of the rationale for the remedy proposed for each AOI or group of AOIs; and

VIII.I.5.g. An assessment of institutional requirements (e.g., state permit requirements that may impact remedy implementation).

VIII.I.6. The Administrative Authority will review and evaluate the RAS and provide the Permittee with written notification of the study's approval or a notice of deficiency. If the Administrative Authority determines the RAS does not fully meet the requirements detailed in Conditions VIII.I.1 through VIII.I.5, the Administrative Authority shall notify the Permittee in writing of the RAS's deficiencies, and specify a due date for submittal of a revised RAS to the Administrative Authority. In addition, the Administrative Authority may require the Permittee to evaluate additional remedies or particular elements of one or more proposed remedies.

VIII.J. RISK MANAGEMENT PLAN

Within ninety (90) days of the Administrative Authority's approval of the RAS, the remedy/remedies proposed for selection shall be documented and submitted in the Risk Management Plan. The Permittee shall propose corrective action remedies in accordance with Chapter IV of the RCRA Corrective Action Plan (Final), May 1994, OSWER Directive 9902.3-2A or as directed by the Administrative Authority.

VIII.J.1. The Risk Management Plan shall at a minimum include:

VIII.J.1.a. A summary of the remedial alternatives for each AOI and the rationale used for remedy selection;

VIII.J.1.b. The final CSM with proposed remedies, including locations of AOIs addressed by a risk management activity, COC concentrations that represent the long-term fate and transport of residual COCs and the exposure pathways affected by the risk management activity;

VIII.J.1.c. Cost estimates and implementation schedules for proposed final remedies;

VIII.J.1.d. Proposed remedy design and implementation precautions, including special technical problems, additional engineering data required, permits and regulatory requirements, property access, easements and right-of-way requirements, special health and safety requirements, and community relations activities;

VIII.J.1.e. Remedy performance criteria and monitoring:

The Permittee shall identify specific criteria (such as land use changes, fate and transport model verification and constructed remedy performance) that will be evaluated to demonstrate that the risk management activity implemented will remain protective. A schedule for periodic performance review (such as monitoring data summaries, including graphical and statistical analyses) shall be established to demonstrate that the implemented activities are consistently achieving and maintaining desired results. Further, a mechanism shall be established to re-evaluate risk management activities in the event the implemented action does not achieve and maintain the performance standards;

VIII.J.1.f. Contingency plans; and

VIII.J.1.g. Description and schedules for performance reviews.

VIII.J.2. After the Permittee submits the Risk Management Plan, the Administrative Authority will review and evaluate the plan and subsequently either inform the Permittee in writing that the plan is acceptable for public review or issue a notice of deficiency.

VIII.J.3. If the Administrative Authority determines the Risk Management Plan does not fully meet the remedial objectives, the Administrative Authority shall notify the Permittee in writing of the plan's deficiencies and specify a due date for submittal of a revised Final Risk Management Plan. In addition, the Administrative Authority may require the Permittee to evaluate additional remedies or particular elements of one or more proposed remedies.

VIII.J.4. After the Administrative Authority has determined the Risk Management Plan is acceptable for public review, the Administrative Authority shall inform the Permittee in writing and instruct the Permittee to submit the plan as a Class 3 permit modification request in accordance with the requirements of LAC 33:V.321.C.3.

VIII.J.5. After conclusion of a sixty (60) day comment period, the Administrative Authority will either grant or deny the Class 3 permit modification request. In addition the Administrative Authority must consider and respond to all significant comments received during the sixty (60) day comment period.

VIII.J.6. If the Class 3 Modification request is granted, the Administrative Authority shall prepare a draft permit incorporating the proposed changes in accordance with LAC 33:V.703.C and solicit public comment on the draft permit modification according to Condition VIII.N.3 of this permit.

VIII.J.7. If, after considering all public comments, the Administrative Authority determines that the Risk Management Plan is adequate and complete, the Administrative Authority will issue a public notice for final approval the Class 3 permit modification. The resultant modified permit will include schedules for remedy implementation as well as financial assurance provisions as required by Condition VIII.A.5 of this permit.

VIII.K. DETERMINATION OF NO FURTHER ACTION (NFA)

VIII.K.1. NFA-ATT DETERMINATIONS FOR SPECIFIC SWMUs/AOCs

VIII.K.1.a. Based on the results of the site investigations, screening, risk evaluations and risk management activities, the Permittee may request a NFA-ATT (At This Time) determination for a specific SWMU/AOC by submittal of a Class 1¹ permit modification (¹ requiring Administrative Authority approval) request under LAC 33:V.321.C.1. The NFA-ATT request must contain information demonstrating that there are no releases of hazardous constituents from a particular SWMU/AOC that pose a threat to human health and/or the environment.

The basis for the determination of NFA-ATT shall follow the guidelines as described in the RECAP (Section 1.2.1 of RECAP) for each AOI, depending on the MO used.

VIII.K.1.b. If, based upon review of the Permittee's request for a permit modification, the results of the site investigations, and other information the Administrative Authority determines that releases or suspected releases from an individual SWMU/AOC which were investigated either are non-existent or do not pose a threat to human health and/or the environment, the Administrative Authority may grant the requested modification.

VIII.K.1.c. In accordance with LAC 33:V.321.C.1.a.ii, the Permittee must notify the facility mailing list within ninety (90) days of the Administrative Authority's approval of the Class 1¹ permit modification request.

VIII.K.2. FACILITY-WIDE NFA-ATT DETERMINATION

VIII.K.2.a. Upon the completion of all activities specified in the Risk Management Plan and after all SWMUs and AOCs at the facility have been remediated according to the standards dictated by the selected RECAP MO, the Permittee shall submit a summary report supporting a determination of NFA-ATT on a facility-wide basis.

VIII.K.2.b. The summary report must include a historical narrative for each SWMU/AOC at the site that includes a summary of the investigation, sampling & analysis, remedial, and confirmatory sampling activities leading to the NFA-ATT request. The basis for the determination of NFA-ATT shall follow the guidelines as described in the RECAP (Section 1.2.1 of RECAP) for each AOI, depending on the MO used. The facility-wide NFA-ATT determination must consider any newly-identified SWMUs/AOCs discovered after submittal of the Risk Management Plan.

VIII.K.2.c. The Administrative Authority will review and evaluate the summary report and subsequently either inform the Permittee in writing that the report is acceptable for public review or issue a notice of deficiency.

VIII.K.2.d. If the Administrative Authority determines the summary report does not fully demonstrate that all remedial objectives have been satisfied, the Administrative Authority shall notify the Permittee in writing of the summary report's deficiencies and specify a due date for submittal of a revised summary report.

VIII.K.2.e. After the Administrative Authority has determined the facility-wide NFA-ATT summary report is acceptable for public review, the Administrative Authority shall inform the Permittee in writing and instruct the Permittee to submit the summary report as a Class 3 permit modification request in accordance with the requirements of LAC 33:V.321.C.3.

VIII.K.2.f. After conclusion of a sixty (60) day comment period, the Administrative Authority will either grant or deny the Class 3 permit modification request. In addition the Administrative Authority must consider and respond to all significant comments received during the sixty (60) day comment period.

VIII.K.2.g. If, based upon review of the Permittee's Class 3 permit modification request, the results of the site investigations, confirmatory sampling, and other pertinent information, the Administrative Authority determines that all SWMUs and AOCs have been remediated to the selected

determines that all SWMUs and AOCs have been remediated to the selected MO and no further action at the facility is warranted, the Administrative Authority will grant the modification request.

VIII.K.2.h. If the Class 3 Modification request is granted, the Administrative Authority shall prepare a draft permit incorporating the proposed changes in accordance with LAC 33:V.703.C and solicit public comment on the draft permit modification according to Condition VIII.N.4 of this permit.

VIII.K.2.i. If, after considering all public comments, the Administrative Authority determines that all activities specified in the Risk Management Plan have been completed and that all SWMUs and AOCs have been remediated to the selected MO, the Class 3 permit modification for facility-wide NFA-ATT will receive final approval. The CAS permit conditions will remain a part of the modified permit in the event that the remedial actions taken fail to maintain the established performance standard and to address any SWMUs/AOCs discovered at a later date.

VIII.K.3. CONTINUED MONITORING

If necessary to protect human health and/or the environment, a determination of NFA-ATT shall not preclude the Administrative Authority from requiring continued monitoring of air, soil, groundwater, or surface water, when site-specific circumstances indicate that releases of hazardous waste or hazardous constituents are likely to occur.

VIII.K.4. ADDITIONAL INVESTIGATIONS

A determination of NFA-ATT shall not preclude the Administrative Authority from requiring further investigations, studies, or remediation at a later date, if new information or subsequent analysis indicates a release or likelihood of a release from a SWMU/AOC at the facility that is likely to pose a threat to human health and/or the environment. In such a case, the Administrative Authority shall initiate a modification to the Permit according to LAC 33:V.321.

VIII.L. NOTIFICATION REQUIREMENTS FOR AND ASSESSMENT OF NEWLY-IDENTIFIED SWMUs AND POTENTIAL AOCs

VIII.L.1. The Permittee shall notify the Administrative Authority, in writing, of any newly-identified SWMUs and potential AOCs (i.e., a unit or area not specifically identified during previous corrective action assessments, RFA, etc.), discovered in the course of ground water monitoring, field investigations, environmental audits, or other means, no later than thirty (30) days after discovery. The Permittee shall also notify the Administrative Authority of any newly-constructed land-based SWMUs (including but not limited to, surface impoundments, waste piles, landfills, land treatment units) and newly-constructed SWMUs where any release of hazardous constituents may be difficult to identify (e.g., underground storage tanks) no later

than thirty (30) days after construction. The notification shall include the following items, to the extent available:

VIII.L.1.a. The location of the newly-identified SWMU or potential AOC on the topographic map required under LAC 33:V.517.B. Indicate all existing units (in relation to other SWMUs/AOCs);

VIII.L.1.b. The type and function of the unit;

VIII.L.1.c. The general dimensions, capacities, and structural description of the unit (supply any available drawings);

VIII.L.1.d. The period during which the unit was operated;

VIII.L.1.e. The specifics, to the extent available, on all wastes that have been or are being managed at the SWMU or potential AOC; and

VIII.L.1.f. Results of any sampling and analysis required for the purpose of determining whether releases of hazardous waste including hazardous constituents have occurred, are occurring, or are likely to occur from the SWMU/AOC.

VIII.L.2. Based on the information provided in the notification, the Administrative Authority will determine whether or not the area is a newly-identified SWMU or AOC. If the area is determined to be a newly-identified SWMU or AOC, the Administrative Authority will inform the Permittee in writing and request that the Permittee submit a Class 1¹ permit modification (¹ requiring Administrative Authority approval) request under LAC 33:V.321.C.1 to add the newly-identified SWMU/AOC to Appendix 1, Table 1 of this permit.

Further, the Administrative Authority will determine the need for further investigations or corrective measures at any newly identified SWMU or AOC. If the Administrative Authority determines that such investigations are needed, the Administrative Authority may require the Permittee to prepare a plan for such investigations. The plan for investigation of SWMU or AOC will be reviewed for approval as part of the current CAS Investigation Workplan or a new CAS Investigation Workplan. The results of the investigation of any newly-discovered SWMU/AOC shall be incorporated into the CSM.

VIII.M. NOTIFICATION REQUIREMENTS FOR NEWLY-DISCOVERED RELEASES AT A SWMU OR AOC

The Permittee shall notify the Administrative Authority of any release(s) from a SWMU or AOC of hazardous waste or hazardous constituents discovered during the course of ground water monitoring, field investigation, environmental auditing, or other means. The notification must be in accordance with the procedures specified in Conditions II.E.16 through II.E.20 of this permit and based upon the nature, extent, and severity of the release.

Such newly-discovered releases may be from newly-identified SWMUs or AOCs, newly-constructed SWMUs, or from SWMUs or AOCs for which, based on the findings of the CSM, completed RECAP Report, or investigation of an AOC, the Administrative Authority had previously determined no further investigation was necessary. The notification shall include information concerning actual and/or potential impacts beyond the facility boundary and on human health and the environment, if available at the time of the notification.

The Administrative Authority may require further investigation and/or interim measures for the newly-identified release(s), and may require the Permittee to prepare a plan for the investigation and/or interim measure. The plan will be reviewed for approval as part of the CAS Investigation Workplan or a new CAS Investigation Workplan. The Permit will be modified to incorporate the investigation, according to the Class 1¹ permit modification (¹ requiring Administrative Authority approval) procedures under LAC 33:V.321. The results of the investigation of any newly-identified release(s) shall be incorporated into the CSM.

VIII.N. PUBLIC PARTICIPATION REQUIREMENTS

Public participation is an essential element in the implementation of any corrective action program at the facility. The CAS promotes the early and continued involvement of stakeholders in site remediation activity during permit issuance, renewal, or modification. The public is invited to review and comment on the corrective action requirements contained in any draft permitting decisions or draft permit modification documents and the associated plans and reports submitted by the Permittee. The Administrative Authority reserves the right to require more extensive public participation requirements based upon site-specific conditions and other relevant factors (e.g., compliance history, potential offsite impact, community interest, etc.). At a minimum, the public participation requirements shall include the following.

VIII.N.1. NFA-ATT Determinations for Specific SWMUs/AOCs

Based on the results of the site investigations, screening, risk evaluations and risk management activities, the Permittee may request a NFA-ATT determination for a specific SWMU/AOC by submittal of a Class 1¹ permit modification request (¹ requiring Administrative Authority approval) under LAC 33:V.321.C.1. The Permittee must notify the facility mailing list within 90 days of the Administrative Authority's approval of the Class 1¹ permit modification request, in accordance with LAC 33:V.321.C.1.a.ii and Condition VIII.K.1.c of this permit.

VIII.N.2. Draft Permitting Decision

The public may review and comment on the terms and conditions of the CAS during the public notice and comment period of the draft permitting decision. The Administrative Authority shall issue public notice upon preparation of the draft permitting decision in accordance with LAC 33:V.715. During the forty-five (45) day public comment period, the Administrative Authority will accept public comments on the draft permitting decision. At the end of the public comment period, the Administrative Authority will consider and address all public comments and make

any necessary revisions to the draft permitting decision. After addressing all public comments, the Administrative Authority will issue a public notice for issuance of the final permitting decision. The final permitting decision will include a "Responsiveness Summary" detailing all comments received on the draft permitting decision and the actions taken (if necessary) to correct the draft before issuance of the final permitting decision.

VIII.N.3. Final Remedy Selection

The public may review and comment on the terms and conditions of the Risk Management Plan as described in Conditions VIII.J.4 through VIII.J.7 of this permit. If after addressing all public comments the Administrative Authority determines that the Risk Management Plan is satisfactory, the Administrative Authority will prepare a draft permit modification document in accordance with LAC 33:V.703.C.

The draft permit modification document will include a "Basis of Decision". The "Basis of Decision" will identify the proposed remedy for corrective action at the site and the reasons for its selection, describe all other remedies that were considered, and solicit for public review and comments on the Risk Management Plan included in the draft permit modification document.

After addressing all public comments, the Administrative Authority will issue a public notice for issuance of the final permit modification. The final permit modification will include a "Responsiveness Summary" detailing all comments received on the draft permit modification and the actions taken (if necessary) to correct the draft before issuance of the final permit modification.

VIII.N.4. Facility-Wide NFA-ATT

Upon the completion of all activities specified in the Risk Management Plan and after all facility remedial objectives have been met, the Permittee may submit a summary report for a determination of NFA-ATT on a facility-wide basis in accordance with Condition VIII.K.2 of this permit. The public may review and comment on the summary report as described in Condition VIII.K.2.b. If after addressing all public comments the Administrative Authority determines that all SWMUs and AOCs have been remediated to the selected MO and no further action at the facility is warranted, the Administrative Authority will prepare a draft permit modification document in accordance with LAC 33:V.703.C.

The draft permit modification document will include a "Basis of Decision". The "Basis of Decision" will provide a summary detailing contamination sources, site investigations, the MO selected for the facility, facility remedial standards, remedial actions, and sampling results demonstrating that the facility remedial standards have been achieved.

After addressing all public comments, the Administrative Authority will issue a public notice for issuance of the final permit modification. The final permit modification will include a "Responsiveness Summary" detailing all comments received on the draft permit modification and the actions taken (if necessary) to correct the draft before issuance of the final permit modification.

Table 1: Corrective Action Strategy Notification and Reporting Requirements

Below is a summary of the major notifications and reports that may be required by the Administrative Authority under the Corrective Action Strategy of this Permit in the event of releases requiring RCRA corrective action. The Administrative Authority will notify the Permittee of the notification and reporting requirements during the scoping meeting or another applicable stage of the corrective action process.

ACTION	DUE DATE
Submit Notice of Intent to request use of the CAS to the Administrative Authority for review and comment (Condition VIII.B.1)	Within sixty (60) days of the effective date of this permit (if facility corrective action is required)
CAS Scoping Meeting held between facility and Administrative Authority (Condition VIII.B.2)	Within sixty (60) days of submittal of the Notice of Intent
Submit Progress Reports on all activities to the Administrative Authority (Condition VIII.C.1)	Schedule to be determined by the Administrative Authority on a case-by-case basis
Make available other reports relating to corrective action to the Administrative Authority (Condition VIII.C.2)	Upon request of the Administrative Authority
Provide briefings to the Administrative Authority (Condition VIII.C.3)	As necessary and upon request by the Administrative Authority
Submit Conceptual Site Model (CSM) (Condition VIII.D) and facility Performance Standards (Condition VIII.A.2) to the Administrative Authority	Within one-hundred and twenty (120) days after the scoping meeting
Perform Interim Measures (Condition VIII.E)	As determined by the Administrative Authority on a case by case basis
Submit Corrective Action Strategy (CAS) Workplan for the facility investigation to the Administrative Authority (Condition VIII.F)	Within one-hundred and eighty (180) days after the CAS Scoping Meeting
Implement site investigation activities under CAS Investigation Workplan according to approved schedule (Condition VIII.G)	Within fourteen (14) days of receipt of approval by the Administrative Authority
Submit RECAP Report to the Administrative Authority (Condition VIII.H)	Within ninety (90) days of completion of the site investigation
Submittal of Remedial Alternatives Study (RAS) to the Administrative Authority (Condition VIII.I)	Within ninety (90) days of completion of approval of the RECAP Report by the Administrative Authority

Submit Risk Management Plan to the Administrative Authority (Condition VIII.J)	Within ninety (90) days of approval of the RAS by the Administrative Authority
Submit requests for unit specific and facility-wide NFA-ATT determinations to the Administrative Authority (Condition VIII.K)	As necessary
Notification of newly-identified SWMUs and potential AOCs (Condition VIII.L)	Thirty (30) days after discovery
Notification of newly-discovered releases (Condition VIII.M)	According to the requirements of Conditions II.E.16 through II.E.20 of this permit

APPENDIX 1: SUMMARY OF CORRECTIVE ACTION ACTIVITIES

The intent of Appendix 1 is to provide an overview of the history and current status of the corrective action process at the site at the time of issuance of the final permit and may not necessarily provide a definitive regulatory determination for a particular SWMU or AOC. The classification of an individual SWMU or AOC is subject to change by the Administrative Authority based on future geological/hydrogeological conditions and future available information available to the Administrative Authority.

The following SWMUs and AOCs have been identified by the original March 30, 1987 RFA (EDMS Document 1548106). The date of the letter authorizing the current activity and its location in EDMS is also provided on this Table.

AOC/SWMU NUMBER	NAME/DESCRIPTION	CURRENT STATUS	DOCUMENT DATE	EDMS DOCUMENT NUMBER
SWMU 1	Pond 1 (closed)	Closure Certification Post-Closure	07/01/1981	8130288 (DEQ's approval letter)
SWMU 2	Pond 2 (closed)	Closure Certification Post-Closure	07/01/1981	8130288 (DEQ's approval letter)
SWMU 3	Pond 3 (closed)	Closure Certification Post-Closure	4/5/1983	8130288 (DEQ's approval letter)
SWMU 4	Pond 4 (closed)	Closure Certification Post-Closure	10/15/1986	8130288 (DEQ's approval letter)
SWMU 5	North and South Surge ponds (closed)	Closure Certification Post-Closure	4/21/1989	8130288 (DEQ's approval letter)
SWMU 6	Sulfide Pond (closed)	Closure Certification Post-Closure	5/8/1984	8130288 (DEQ's approval letter)
AOC 1	Cell House	Corrective Action	3/2/2007	35419954 (RECAP Assessment Report)

ATTACHMENT 1

**ATTACHMENT 1
LIST OF FACILITY DOCUMENTS INCORPORATED
IN THE PERMIT BY REFERENCE
LAD062666540 AI# 2644**

DOCUMENT TYPE	DOCUMENT DATE	EDMS DOCUMENT ID #	COMMENTS
Arrangements with local authorities	10/06/2004	32438910	Arrangements with local police and fire departments, local hospital and emergency response teams to assist in emergency response process are found in the 2004 Post-Closure Renewal Application.
Post-Closure cost estimates	05/31/2007	36276732	2007 Post-Closure Cost Estimates
Post-Closure Plan	02/09/2006	33957796 Attachment 15	Updated Post-Closure Plan located in February 2006 Post-Closure Renewal Application Response to Notice of Deficiency
Contingency Plan	10/06/2004	32438910 Appendix J	The Contingency Plan identifies emergency and security information for the plant.
Inspection Plan	02/09/2006	33957796 Attachment 15	This Post-Closure Plan contains the inspection plan that is needed to satisfy the minimum inspection requirements for hazardous waste treatment, storage, and disposal.
Personnel Training Plan	10/06/2004	32438910 Appendix O	This plan, located in volume I, chapter 5, of the Post-Closure Permit Application, documents the training required of personnel involved with the hazardous waste facilities.
Waste Analysis Plan	02/09/2006	33957796 Attachment 13	The Waste Analysis Plan located in February 2006 Post-Closure Renewal Application Response to Notice of Deficiency, is designed to satisfy the general waste analysis standards outlined in LAC 33:V.1519.
Revised Groundwater Sampling and Analysis Plan	02/09/2006	33957796 Attachment 7	This document modifies the monitoring requirements of LAC 33:V. Chapter 33.

RESPONSIVENESS SUMMARY

**RESPONSIVENESS SUMMARY
PIONEER AMERICAS LLC
LAD 062666540-PC-RN-1
AGENCY INTEREST #2644
St. Gabriel, LA**

Item: 1

Reference: Pioneer Americas LLC, St. Gabriel, LA

Issue: Name of company is incorrect

Comment: "Name is incorrect and should read Pioneer Americas LLC or Pioneer throughout permit"

LDEQ Response: The Department acknowledges and concurs with your comment.

Action: The permit will be revised to read "**Pioneer Americas LLC**." The comma following Americas will be removed.

**RESPONSIVENESS SUMMARY
PIONEER AMERICAS LLC
LAD 062666540-PC-RN-1
AGENCY INTEREST #2644
St. Gabriel, LA**

Item: 2

Reference: Pioneer Americas LLC, St. Gabriel, LA

Issue: Movement of Wells 33, 34 & 35 (now 33B, 34B & 35B)

Comment: Movement of Wells 33, 34 & 35 (now 33B, 34B & 35B) has not been addressed in the draft permit.

1) Table 2 of permit needs to be updated with the new well designations.

2) Pioneer will submit a well installation report to LDEQ.

3) The S&A Plan will be updated accordingly

LDEQ Response: The Department acknowledges but does not concur with your comments.

Action: The well installation report regarding designation of new wells has not been received by the Department. Therefore, information on tables cannot be changed until approval of the well installation report. Please be advised that the approved Monitoring Well Plugging and Abandonment and Relocation Workplan states that **"a completed report documenting specified activities will be submitted no later than thirty (30) days after completion of the field activities."** Table 2 of the permit will not be revised.

**RESPONSIVENESS SUMMARY
PIONEER AMERICAS LLC
LAD 062666540-PC-RN-1
AGENCY INTEREST #2644
St. Gabriel, LA**

Item: 3

Reference: Pioneer Americas LLC, St. Gabriel, LA

Issue: Page 5 of 6 OMB (Part A Application)

Comment: Refers to Figures 1 - 3 and Appendix E of the Part A Application that are not in the Draft Permit for reference.

1) Pioneer will submit a new Part A application to the LDEQ.

LDEQ Response: The Department acknowledges, but does not concur with your comments.

Action: Pioneer must submit an updated Part A application in the form of a Class I Permit Modification. The permit will not be revised.

**RESPONSIVENESS SUMMARY
PIONEER AMERICAS LLC
LAD 062666540-PC-RN-1
AGENCY INTEREST #2644
St. Gabriel, LA**

Item: 4

Reference: Pioneer Americas LLC, St. Gabriel, LA

Issue: Condition II. E. 21.a, Schedule of Compliance, Page 13

Comment: Re: II.E.21.a - As discussed during August 28, 2007 meeting between LDEQ, Pioneer, and Providence, the background investigation work plan will be submitted with 90 days of permit issuance, instead of 60 days stipulated in draft permit.

LDEQ Response: The Department acknowledges and concurs with your comment.

Action: The permit will be revised to read **ninety (90) days** instead of **sixty (60) days**.

**RESPONSIVENESS SUMMARY
PIONEER AMERICAS LLC
LAD 062666540-PC-RN-1
AGENCY INTEREST #2644
St. Gabriel, LA**

Item: 5

Reference: Pioneer Americas LLC, St. Gabriel, LA

Issue: Condition II.E.21.b. Schedule of Compliance, Page 13

1) Comment: Regarding II.E.21.b – Also based on meeting discussions, Pioneer will implement the Corrective Action Strategy Notification and Reporting Requirements per Table 1 (page 75), and not submit the work plan for source characterization and delineation of chlorides and barium within 60 days of permit issuance. Pioneer will complete one submittal to “catch up” on Table 1 activities prior to submittal of the CAS work plan.

LDEQ Response: The Department acknowledges, and concurs with your comment.

Action: The permit will be revised to read: **"The facility will initiate a Corrective Action Strategy (CAS) pursuant to Condition VIII Appendix I, Table 1 regarding the chloride and barium contamination. As the facility has already completed much work on this issue, the LDEQ has determined that the facility has met all requirements of Table I prior to the Conceptual Model Study (CMS). Therefore, the facility will be required to submit one CMS report forty-five (45) days after the effective date of this permit. A CAS Workplan must be submitted ninety (90) days after the effective date of the permit."**

**RESPONSIVENESS SUMMARY
PIONEER AMERICAS LLC
LAD 062666540-PC-RN-1
AGENCY INTEREST #2644
St. Gabriel, LA**

Item: 6

Reference: Pioneer Americas LLC, St. Gabriel, LA

Issue: Condition II.E.21.c. Schedule of Compliance, Page 13

Comment: Regarding II.E.21.c. – Pioneer will submit a revised S&A Plan; however a revised Statistical Analysis plan cannot be updated until the background investigation is completed.

LDEQ Response: The Department acknowledges, and concurs with your comment.

Action: The language that reads "**Within sixty (60) days of the effective date of this permit...**" will be replaced with "**Within sixty (60) days of the approval of the final background investigation report referred to in Condition II.E.21.a., a Sampling and Analysis Plan must be submitted. The Sampling and Analysis Plan will include a Statistical Analysis Plan and a Groundwater Monitoring Summary Table that reflects Condition VI.D., Table 1, to detail methods and approaches for the evaluation of monitoring parameters to be followed for the Site-Specific Background Investigation.**" The permit will be revised.

**RESPONSIVENESS SUMMARY
PIONEER AMERICAS LLC
LAD 062666540-PC-RN-1
AGENCY INTEREST #2644
St. Gabriel, LA**

Item: 7

Reference: Pioneer Americas LLC, St. Gabriel, LA

Issue: Pages 28 & 29; Footnote No. 6, Table 2

Comment: Pioneer Chemicals should be Pioneer Americas LLC

LDEQ Response: The Department acknowledges and concurs with your comment.

Action: Table 2, Footnote No. 6 will be revised to read
Pioneer Americas LLC.

**RESPONSIVENESS SUMMARY
PIONEER AMERICAS LLC
LAD 062666540-PC-RN-1
AGENCY INTEREST #2644
St. Gabriel, LA**

Item: 8

Reference: Pioneer Americas LLC, St. Gabriel, LA

Issue: Condition VI.D., Page 27 & Table 3, Page 30; Groundwater Protection Standards

Comment: Groundwater Protection Standards are not provided in Table 3 as referenced on Page 27. Please refer to February 2006 Response to NODs provided to the LDEQ by Pioneer for proposed Groundwater Protection Standards for phenol, cyanide, sulfate. Background studies on sodium, magnesium, and calcium will be performed in an effort to establish groundwater protection criteria for these three compounds.

LDEQ Response: The Department acknowledges, and concurs with your comment.

Action: The permit will be revised on Page 27, Condition VI.D. to state "practical quantitation limit" (PQL) instead of "groundwater protection standard."

**RESPONSIVENESS SUMMARY
PIONEER AMERICAS LLC
LAD 062666540-PC-RN-1
AGENCY INTEREST #2644
St. Gabriel, LA**

Item: 9

Reference: Pioneer Americas LLC, St. Gabriel, LA

Issue: Page 32, Condition VI.G.7

Comment: "Samples containing greater than five (5) NTU are only acceptable when well development is certified by a qualified geologist as 'the best obtainable'." 5 NTU is not practical based on site-specific groundwater conditions. This would result in nearly all 40+ wells needing to be redeveloped prior to the next sampling event. Per August 28, 2007 meeting discussions, Pioneer's contract geologist will certify well development as "best obtainable" initially.

LDEQ Response: The Department acknowledges but does not concur with your comment.

Action: The current language in Condition VI.G.7 is sufficient to address this concern. The sampling goal should be to collect groundwater samples with a turbidity of 5 NTU or less. If this goal is unattainable due to geologic conditions, this should be noted in the field notes and discussed in the groundwater monitoring report. The certification by a qualified geologist that the samples are "**the best obtainable**" may be addressed in the groundwater monitoring report. The permit will not be revised.

**RESPONSIVENESS SUMMARY
PIONEER AMERICAS LLC
LAD 062666540-PC-RN-1
AGENCY INTEREST #2644
St. Gabriel, LA**

Item: 10

Reference: Pioneer Americas LLC, St. Gabriel, LA

Issue: Page 34, Condition VI.I.3

Comment: "Statistically significant evidence of contamination above the groundwater protection standard..."

At this time, Pioneer is only required to perform statistical analyses on pH and specific conductance, and this likely will change to include sodium, magnesium, and calcium after background study is completed. Therefore, shouldn't trigger for all other compounds be exceedance of the respective groundwater protection standards.

LDEQ Response: The Department acknowledges, but does not concur with your comment.

Action: The permit will be not be revised.

**RESPONSIVENESS SUMMARY
PIONEER AMERICAS LLC
LAD 062666540-PC-RN-1
AGENCY INTEREST #2644
St. Gabriel, LA**

Item: 11

Reference: Pioneer Americas LLC, St. Gabriel, LA

Issue: Attachment 1, List of Facility Documents Incorporated in the Permit by Reference

Comment: Document dates do not reflect most recent submittals/financials.” Updates to the Contingency Plan, Inspection Plan, Personnel Training Plan, Waste Analysis Plan, and S&A Plan were provided to the LDEQ in the February 2006 Response to NODs. Also, updated financial assurance documentation was provided in May 2007, and verbally-confirmed receipt by LDEQ.

LDEQ Response: The Department acknowledges and concurs with your comment. However, the February 2006 Response to NODs did not reflect updates to the Contingency Personnel Training Plans.

Action: The permit will be revised.